

**FILE COPY**

**OLIN CORPORATION  
RI ANALYTICAL-WILMINGTON  
SDG: WIL-16  
SD7287, SD7363, SD7693**

CHECKED FOR COMPLETENESS  
OF PARAMETERS ORDERED BY:

  
3/24/2011

**KATAHDIN ANALYTICAL SERVICES, INC.  
600 TECHNOLOGY WAY  
SCARBOROUGH, ME 04074**

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# **SAMPLE DATA PACKAGE**

0000001

**SDG NARRATIVE**  
**KATAHDIN ANALYTICAL SERVICES**  
**OLIN CORPORATION**  
**RI ANALYTICAL - WILMINGTON**  
**WIL-16**  
**SD7287, SD7363, SD7693**

**Sample Receipt**

The following samples were received on November 19, 24 and December 10, 2010 and were logged in under Katahdin Analytical Services work order numbers SD7287, SD7363 and SD7693 for a hardcopy due date of January 5, 2011.

KATAHDIN	OLIN CORPORATION
<u>Sample No.</u>	<u>Sample Identification</u>
SD7287-1	OC-GW-83D-XXX
SD7287-2	OC-GW-83M-XXX
SD7287-3	OC-GW-83S-XXX
SD7287-4	OC-GW-87D-XXX
SD7287-5	OC-MP-5#03-XXX
SD7363-1	OC-GW-402D-XXX
SD7363-2	OC-GW-401D-XXX
SD7693-1	OC-SW-PZ-16RR-XXX
SD7693-2	OC-SW-PZ-17RR-XXX
SD7693-3	OC-SW-SD-1-XXX
SD7693-4	OC-EBK-016
SD7693-5	OC-SW-ISCO-1-DUP
SD7693-6	OC-SW-ICSO-1-XXX
SD7693-7	OC-SW-ICSO-2-XXX

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Kelly Perkins**. This narrative is an integral part of the Report of Analysis.

### Organics Analysis

The samples of SDG WIL-16 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846 , 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

Sample SD7693-6 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as per client request.

### 8033M DMF Analysis

Sample WG86508-6 was analyzed as a duplicate of sample SD7693-1, as per the client's request of one duplicate sample per 20 samples.

Samples SD7287-1, 2, SD7363-2, and SD7693-1 through 7 were manually integrated for the surrogate diethylformamide and/or the target analyte dimethylformamide. The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The MS WG86508-4 had a high recovery for the surrogate diethylformamide which was outside of the QAPP acceptance limits. Since the spike recovery of dimethylformamide was acceptable, the MS was not reanalyzed.

There were no other protocol deviations or observations noted by the organics laboratory staff.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond  
01.10.11

Leslie Dimond  
Quality Assurance Officer

## Katahdin Analytical Services, Inc.

### Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Client: Macfee/Olm	KAS PM: KAP	Sampled By: Client
Project:	KIMS Entry By: GR	Delivered By: GR Fed Ex
KAS Work Order#: SD 7363	KIMS Review By:	Received By: H GR
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 11-24-10 / 10:00

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		✓			Temp (°C): 5.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: Aqueous: No bubble larger than a pea Soil/Sediment: Received in airtight container? Received in methanol? Methanol covering soil?	✓ ✓ ✓ ✓				✓
7. Trip Blank present in cooler?		✓			
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2 Sulfide - >9 Cyanide – pH >12				✓ ✓ ✓	

\* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Client: Mactec John		KAS PM: KAP	Sampled By: Client
Project:		KIMS Entry By: GN	Delivered By: Client
KAS Work Order#: SD7287		KIMS Review By:	Received By: GN
SDG#:	Cooler: 1 of 1	Date/Time Rec.: 11-19-10 / 15:23	

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR.gun.		✓			Temp (°C): 5.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?					Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: Aqueous: No bubble larger than a pea Soil/Sediment: Received in airtight container? Received in methanol? Methanol covering soil?	✓ ✓ ✓ ✓				
7. Trip Blank present in cooler?		✓			
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2 Sulfide - >9 Cyanide – pH >12				✓ ✓ ✓	

\* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

Client:	MAC 100	KIMS Entry By: DD	Delivered By: Client
KAS Work Order#:	SD7693 / SD7694	KIMS Review By:	Received By: DP
SDG #:	Cooler: _____ of _____	Date/Time Rec.:	12/10/10 1630

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 5.4
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: Aqueous: No bubble larger than a pea Soil/Sediment: Received in airtight container?	✓			X	GR 12-13-10
Received in methanol?	✓				
Methanol covering soil?				✓	
7. Trip Blank present in cooler?		✓			
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH - pH <2 Sulfide - >9 Cyanide - pH >12				✓	
				✓	
				✓	
				✓	

\* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments  
 OC-SD-SDZ-XXX no NSD jar received. 2 jars only.

Special Instructions For Lab

Notes: Fraction: T = Total; D = Dissolved; S = SPLP; C = TICP. N = Not Applicable

**Notes:**

- 1) Fraction: T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable
- 2) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, BW = Blank Water, SD = Sediment, SO = Soil, ND = Non-Detect, PR = Product, O = Oil

(Preservation type, RA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, ZH = Zinc Acetate)

$\tau_6 = 24$  hour hold time

Formaldehyde = 3 day hold time  
elinquished: ✓

Coated? Y / N	MADEP Requirement Samples Iced? Y / N
Temp @ receipt:	_____ Deg C
Preservation / pH checked? Y / N	
By: _____ Date: _____	

Date: 11/19/10 Time: 1320 Received: 3/20 Date: 11/19/10  
Date: 11/19/10 Time: 1523 Received: 3/20 Date: 11/19/10

## Special Instructions For Lab

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- Notes:**

  - 1) Fraction: T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable
  - 2) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
  - 3) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil
  - 4) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water
  - 5) Bottle Type: G = Glass, P = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass, AV = 40mL VOA Amber Glass Vial

$\text{C}_{\text{ET6}} = 24$  hours hold time

Formaldehyde = 3 day hold time  
Relinquished: Cla  
Relinquished:

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt:	Deg C
Preservation / pH checked?	Y / N
By:	Date: _____

Client: Olin Corporation		Client Project #: 6107090016		INVOICE INFO		Shaded Areas for office use only	
Address: 3855 North Ocoee St. Suite 200 Cleveland, TN 37312		Work Site ID: Wilmington, MA		Company Name: Olin Corp			
Phone: 423-336-4511		Fax: 423-336-1466		Email: SGMarrow@olin.com		Same as Client	
Requested Turnaround Time (SPECIFY)		Regulatory Programs: MADEP MCP		Superfund		Company Contact: ERG Accounts Payable	
Standard _____	Rush _____	Report Requirements	Level IV Package	Level II Package			
(Lab Approval Required)		EDD Requirements: MACTEC EQUISE EDD				Job #	Quote #
						Lab SDG #	PO #
<p style="text-align: center;"><b>MACTEC</b></p> <p style="text-align: center;">SD7363</p>							
Sample Matrix (3)		Composite (G) or Grab (G)		Total # of Containers		Comments (Special Instructions)	
NDM/NDPA (Mod 521)		Aldophenols (WS-MS-0010)		Cr+6 (3060A / 7199)		DMF (Mod 8033 - GC/NPD)	
DC Code (2)		Sample Matrix (3)		Cr+6 (846 B315A)*		Phthalic Anhydride (acid)	
Trac(tion (1)		Composite (G) or Grab (G)		EDD Requirements: MACTEC EQUISE EDD		Formaldehyde/Acetaldehyde	
OC-GW-401D-XXX		Date/Time Collected				Hydrazine, MMH, UDMH Mod 8315 LC/MS/MS)	
		11/22/2010	T	FS	GW	G	X
		2:40:00 PM					

Special Instructions For I ab

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- Notes:

  - 1.) Fraction: T = Total, D = Dissolved, S = SPT, P = TCLP, N = Not Applicable
  - 2.) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
  - 3.) Sample Matrix: GW = Groundwater, SW = Surface Water, CW = Drinking Water SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil
  - 4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water
  - 5.) Bottle Type: G = Glass, P = Plastic, V = 40ml VOA Glass Vial, AG = Amber Glass, AV = 40ml VOA Amber Glass Vial

$\Sigma r+6 = 24$  hour hold time

Formaldehyde = 3 day hold time

**Relinquished:**

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt:	Deg C
Preservation / pH checked?	Y / N
By:	Date: _____

1070

Shaded Areas for office use only							
INVOICE INFO				Comments (Special Instructions)			
Client Project #: 6107090016		Company Name: Olin Corp					
Work Site ID: Wilmington, MA		Company Contact: ERG Accounts Payable					
Reports Sent To: Steve Marrow		Address:					
Phone: 423-336-4511 Fax: 423-336-1466 Email: SGMarrow@olin.com Email Rpt: _____		Phone:					
Requested Turnaround Time (SPECIFY)		Regulatory Programs: M/ADEP MCP _____ Superfund _____					
Standard _____ Rush _____ (Lab Approval Required)		Report Requirements: Level IV Package _____ Level II Package _____					
EDD Requirements: MACTEC EQUIS EZ EDD _____		Job # _____ Lab SDG # _____		Quote # _____ PO # _____			
<b>MACTEC</b>							
Sample ID _____		Date/Time Collected					
DC-SW-FZ-16RR-XXX		12/9/2010 3:10:00 PM		T	FS	SW	G 2
DC-SW-FZ-17RR-XXX		12/10/2010 8:15:00 AM		T	FS	SW	G 2
DC-SW-SD-1-XXX		12/9/2010 1:00:00 PM		T	FS	SW	G 2
DC-EBK-016		12/10/2010 11:00:00		T	EB	SW	G 2
DC-SW-ISCO-1-DUP		12/10/2010 10:45:00		T	FD	SW	G 2
DC-SW-ISCO-1-MSD		12/10/2010 10:45:00		T	M	SW	G 2
DC-SW-ISCO-1-XMS		12/10/2010 10:45:00		T	M	SW	G 2

Special Instructions For Lab

Notes:

- 1.) Fraction: T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable  
 2.) QC Codes: F = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank  
 3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil  
 4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sulfuric Acid, ZH = Zinc Hydroxide, ZA = Zinc Acetate, ME = Methanol, DI = DI Water

$r+6 = 24$  hour hold time

Formaldehyde = 3 day hold time

Temp @ receipt: \_\_\_\_\_ Deg C  
Preservation / pH checked? Y / N  
By: \_\_\_\_\_ Date: \_\_\_\_\_

me: \_\_\_\_\_

MACTEC

SD 17493

Sample ID		Date/Time Collected	Comments (Special Instructions)	
OC-SW-ISCO-1-XXX		12/10/2010 10:45:00	T	FS SW G 2
OC-SW-ISCO-2-XXX		12/9/2010 11:45:00	T	FS SW G 2
GC Code (2)		Fraction (1)		
Sample Matrix (3)		Compulsive (C) or Grab (G)		
NDMA/NPDA (Mod 521)		Alkylphenols (WS-MS-0010).		
Total # of Containers		Total# of Containers		
DMF (Mod 8033 - GC/NPD)		CR+6 (3060A / 7199)		
DMF (Mod 8033 - GC/NPD)		DMF (Mod 8033 - GC/NPD)		
Phthalic Anhydride (acid)		Mod 8000 - HPLC).		
Formaldehyde/Acetaldehyde		(SW-846 8315A).		
Dexx / Kemperle (8000B - HPLC)		Dexx / Kemperle (8000B - HPLC)		
Hydrazine, MMH, UDMH		Hydrazine, MMH, UDMH		
Mod 8315 LC/MS/MS)		Mod 8315 LC/MS/MS)		
Hydrazine, MMH, UDMH		DMF (Mod 8033 - GC/NPD)		
<-Preservative Type (4)		CR+6 (7199)		
<-Bottle Type (5)				

Special Instructions For Lab

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Notes

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Fraction: 1 = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable

MS = Matrix Spike Duplicate MSB = Matrix Spike Blank PF = Performance Evaluation Sample

הנִזְקָנָה בְּבֵית־יְהוָה וְבַתְּרוּבָה

$\beta$ ) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid.

Preservation Time: WA = Hydrochloric Acid NH = Nitric Acid

reservoir type: HFA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate

6.) Bottle Type: G = Glass, P = Plastic, V = 40mL VOA Glass Vial, AS = Amber Glass, AV = 48mL VPA Amber Glass Vial

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$$3x+6 = 24 \text{ hour hold time}$$

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Formaldehyde = 3 day hold time  
**Relinquished:** Ch. m. Date: 12/10/12 Time: 1440 Received: 12/10/12 Date: 12/10/12  
**Relinquished:** z Date: 12/10/12 Time: 1624 Received: 12/10/12 Date: 12/10/12  
Samples lead? Y/N \_\_\_\_\_  
Temp @ receipt: \_\_\_\_\_ Deg C \_\_\_\_\_  
Preservation / pH checked? Y/N \_\_\_\_\_  
By: \_\_\_\_\_ Date: \_\_\_\_\_



# Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Page: 1 of 2

Nov. 22, 2010

02:01 PM

Quote/Incoming: OLWIL

**Login Number:** SD7287

**Account:** OLINCO001

Olin Corporation

**Project:**

Web

### Login Information

ANALYSIS INSTRUCTIONS : Batch as many as possible. See special acceptance limits in QAPP. Include Lab Dup as batch QC, 1:20.

CHECK NO.

:

CLIENT PO#

: ERRE9844, REWI0014

COOLER TEMPERATURE

: 5.4

DELIVERY SERVICES

: Client

EDD FORMAT

: KAS075-CSV, KAS134QC-CSV

LOGIN INITIALS

: DD

PM

: KAP

PROJECT NAME

: RI Analytical - Wilmington

QC LEVEL

: IV

REGULATORY LIST

:

REPORT INSTRUCTIONS

: Merge results. Data summary needs all forms. Send full CDs to K. Chatterton and C. Ricardi. Send CD with SDS, EDD and SDP only to S. Morrow.

SDG ID

: WIL-16

SDG STATUS

: Begin

### Report CC Addresses:

Ms. Kelly Chatterton

MACTEC

107 Audubon Rd.

Suite 301

Wakefield, MA 01880

Steve Morrow

Olin Corporation

3855 North Ocoee Street

Suite 200

Cleveland, TN 37312

### Invoice CC Addresses:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	Verbal PR	Due Date	Mailed
SD7287-1	OC-GW-83D-XXX	18-NOV-10 13:49	19-NOV-10		16-DEC-10	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 02-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	
SD7287-2	OC-GW-83M-XXX	18-NOV-10 12:19	19-NOV-10		16-DEC-10	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 02-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	
SD7287-3	OC-GW-83S-XXX	18-NOV-10 10:47	19-NOV-10		16-DEC-10	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 02-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	
SD7287-4	OC-GW-87D-XXX	17-NOV-10 14:17	19-NOV-10		16-DEC-10	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 01-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	

60000013

MAP 11/22/10



## Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Page: 2 of 2

Nov. 22, 2010

02:01 PM

Quote/Incoming: OLWIL

Login Number: SD7287

Account: OLINCO001

Web

Olin Corporation

Project:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	Verbal PR	Due Date	Mailed
SD7287-5	OC-MP-5#03-XXX	19-NOV-10 09:19	19-NOV-10		16-DEC-10	
Matrix Aqueous	Product S SW8033M		Hold Date (shortest) 03-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments

Total Samples: 5

Total Analyses: 5

Nov 22 (2010)  
000014



# Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Page: 1 of 1

Login Number: SD7363

Account: OLINCO001

Olin Corporation

Project:

Web

### Login Information

ANALYSIS INSTRUCTIONS : Batch as many as possible. See special acceptance limits in QAPP. Include Lab Dup as batch QC, 1:20.

CHECK NO. :

CLIENT PO# : ERRE9844, REWI0014

COOLER TEMPERATURE : 5.4

DELIVERY SERVICES : FedEx

EDD FORMAT : KAS075-CSV, KAS134QC-CSV

LOGIN INITIALS : GN

PM : KAP

PROJECT NAME : RI Analytical - Wilmington

QC LEVEL : IV

REGULATORY LIST :

REPORT INSTRUCTIONS : Merge results. Data summary needs all forms. Send full CDs to K. Chatterton and C. Ricardi. Send CD with SDS, EDD and SDP only to S. Morrow.

SDG ID : WIL-16

SDG STATUS : cont

### Primary Report Address:

Mr. Chris Ricardi

MACTEC Engineering and Consulting  
P.O. Box 7050 DTS

Portland, ME 04112-7050

### Primary Invoice Address:

ERG

Olin Corporation

3855 North Ocoee St  
Suite 200  
Cleveland, TN 37312

### Report CC Addresses:

Ms. Kelly Chatterton

MACTEC

107 Audubon Rd.

Suite 301

Wakefield, MA 01880

Steve Morrow

Olin Corporation

3855 North Ocoee Street

Suite 200

Cleveland, TN 37312

### Invoice CC Addresses:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SD7363-1	OC-GW-402D-XXX	23-NOV-10 09:30	24-NOV-10			21-DEC-10	
Matrix Aqueous	Product S SW6033M		Hold Date (shortest) 07-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count		Comments
SD7363-2	OC-GW-401D-XXX	22-NOV-10 14:40	24-NOV-10			21-DEC-10	
Matrix Aqueous	Product S SW6033M		Hold Date (shortest) 06-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count		Comments

Total Samples: 2

Total Analyses: 2

1/24/10  
0000015



# Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Page: 1 of 2

Login Number: SD7693

Account: OLINCO001

Olin Corporation

Project:

Web

### Login Information

ANALYSIS INSTRUCTIONS : Batch as many as possible. See special acceptance limits in QAPP. Include Lab Dup as batch QC, 1:20.

CHECK NO. :

CLIENT PO# : ERRE9844, REWI0014

COOLER TEMPERATURE : 5.4

DELIVERY SERVICES : Client

EDD FORMAT : KAS075-CSV

LOGIN INITIALS : DD

PM : KAP

PROJECT NAME : RI Analytical - Wilmington

QC LEVEL : IV

REGULATORY LIST :

REPORT INSTRUCTIONS : Merge results. Data summary needs all forms. Send full CDs to K. Chatterton and C. Ricardi. Send CD with SDS and SDP only to S. Morrow.

SDG ID : WIL-16

SDG STATUS : end

**Primary Report Address:**

Mr. Chris Ricardi

MACTEC Engineering and Consulting  
P.O. Box 7050 DTS

Portland, ME 04112-7050

cricardi@maotec.com

**Primary Invoice Address:**

ERG

Olin Corporation

3855 North Ocoee St  
Suite 200  
Cleveland, TN 37312

**Report CC Addresses:**

Ms. Kelly Chatterton

MACTEC

107 Audubon Rd.

Suite 301

Wakefield, MA 01880

Steve Morrow

Olin Corporation

3855 North Ocoee Street

Suite 200

Cleveland, TN 37312

**Invoice CC Addresses:**

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	Verbal PR	Due Date	Mailed
SD7693-1	OC-SW-PZ-16RR-XXX	09-DEC-10 15:10	10-DEC-10		05-JAN-11	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 23-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	
SD7693-2	OC-SW-PZ-17RR-XXX	10-DEC-10 08:15	10-DEC-10		05-JAN-11	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 24-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	
SD7693-3	OC-SW-SD-1-XXX	09-DEC-10 13:00	10-DEC-10		05-JAN-11	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 23-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	
SD7693-4	OC-EBK-016	10-DEC-10 11:00	10-DEC-10		05-JAN-11	
Matrix Aqueous	Product S SW8033M	Hold Date (shortest) 24-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count	Comments	

00000/6

KAP 12/13/10



## Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Dec. 13, 2010

03:52 PM

Page: 2 of 2

Login Number: SD7693

Quote/Incoming: OLWIL

Account: OLINCO001

Web

Olin Corporation

Project:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SD7693-5	OC-SW-ISCO-1-DUP	10-DEC-10 10:45	10-DEC-10			05-JAN-11	
Matrix Aqueous	Product S SW8033M		Hold Date (shortest) 24-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count		Comments
SD7693-6	OC-SW-ISCO-1-XXX	10-DEC-10 10:45	10-DEC-10			05-JAN-11	
Matrix Aqueous	Product S SW8033M		Hold Date (shortest) 24-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count		Comments MS/MSD
SD7693-7	OC-SW-ISCO-2-XXX	09-DEC-10 11:45	10-DEC-10			05-JAN-11	
Matrix Aqueous	Product S SW8033M		Hold Date (shortest) 23-DEC-10	Bottle Type 40mL Vial+HCl	Bottle Count		Comments

Total Samples: 7

Total Analyses: 7

0000017

KAP 12/13/10

# **SAMPLE DATA SUMMARY PACKAGE**

## KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a greater rate for false negatives, i.e. greater than 1%, than those results reported as "U" PQL/LOQ or "U" LOD.

- \* Compound recovery outside of quality control limits.

- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

- J Used for Pesticide/Aroclor analyte when there is a greater than 40% difference for detected concentrations between the two GC columns.

- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

- N Presumptive evidence of a compound based on a mass spectral library search.

- A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

- P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/18/10  
Received Date: 11/19/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 09:42  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7287-1  
Client ID: OC-GW-83D-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide		0.23	1.0	0.020	0.020	0.0031
	diethylformamide		96%				

Page 01 of 01 BDL2006.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/18/10  
Received Date: 11/19/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 09:56  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7287-2  
Client ID: OC-GW-83M-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		101%				

Page 01 of 01 BDL2007.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SD7287-3  
Project: RI Analytical - Wilmington Client ID: OC-GW-83S-XXX  
PO No: SDG: WIL-16  
Sample Date: 11/18/10 Extracted by:  
Received Date: 11/19/10 Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 01-DEC-2010 10:10 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG85685  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		104%				

Page 01 of 01 BDL2008.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation Lab ID: SD7287-4  
Project: RI Analytical - Wilmington Client ID: OC-GW-87D-XXX  
PO No: SDG: WIL-16  
Sample Date: 11/17/10 Extracted by:  
Received Date: 11/19/10 Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 01-DEC-2010 10:25 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG85685  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		107%				

Page 01 of 01 BDL2009.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/19/10  
Received Date: 11/19/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 11:08  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7287-5  
Client ID: OC-MP-5#03-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide		0.020	1.0	0.020	0.020	0.0031
	diethylformamide		110%				

Page 01 of 01 BDL2012.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/23/10  
Received Date: 11/24/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 10:39  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7363-1  
Client ID: OC-GW-402D-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide			104%			

Page 01 of 01 BDL2010.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/22/10  
Received Date: 11/24/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 10:53  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7363-2  
Client ID: OC-GW-401D-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		105%				

Page 01 of 01 BDL2011.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/09/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 14:01  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-1  
Client ID: OC-SW-PZ-16RR-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JL,P  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		103%				

Page 01 of 01 BDL2124.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/09/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 13:47  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: WG86508-6  
Client ID: OC-SW-PZ-16RR-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		96%				

Page 01 of 01 BDL2123.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation                                  Lab ID: SD7693-2  
Project: RI Analytical - Wilmington                    Client ID: OC-SW-PZ-17RR-XXX  
PO No:    SDG: WIL-16  
Sample Date: 12/10/10                                 Extracted by:  
Received Date: 12/10/10                               Extraction Method: 8033M  
Extraction Date:                                         Analyst: JLP  
Analysis Date: 21-DEC-2010 14:16                      Analysis Method: SW846 8033M  
Report Date: 01/07/2011                                Lab Prep Batch: WG86508  
Matrix: WATER    Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		105%				

Page      01 of 01      BDL2125.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/09/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 14:30  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-3  
Client ID: OC-SW-SD-1-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		107%				

Page 01 of 01 BDL2126.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SD7693-4  
Project: RI Analytical - Wilmington Client ID: OC-EBK-016  
PO No: SDG: WIL-16  
Sample Date: 12/10/10 Extracted by:  
Received Date: 12/10/10 Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 21-DEC-2010 14:44 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG86508  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		106%				

Page 01 of 01 BDL2127.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/10/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 14:59  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-5  
Client ID: OC-SW-ISCO-1-DUP  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		106%				

Page 01 of 01 BDL2128.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/10/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 15:42  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-6  
Client ID: OC-SW-ISCO-1-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		108%				

Page 01 of 01 BDL2131.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SD7693-7  
Project: RI Analytical - Wilmington Client ID: OC-SW-ISCO-2-XXX  
PO No: SDG: WIL-16  
Sample Date: 12/09/10 Extracted by:  
Received Date: 12/10/10 Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 21-DEC-2010 15:13 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG86508  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		108%				

Page 01 of 01 BDL2129.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Lab ID: WG85685-1  
Project: RI Analytical - Wilmington Client ID: WG85685-Blank  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 01-DEC-2010 08:20 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG85685  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		88%				

Page 01 of 01 BDL2003.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Lab ID: WG86508-1  
Project: RI Analytical - Wilmington Client ID: WG86508-Blank  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 21-DEC-2010 13:00 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG86508  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		92%				

Page 01 of 01 BDL2120.d

FORM 2  
WATER DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON      SDG No.: WIL-16

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4 #	TOT OUT
01	WG85685-BLANK	WG85685-1	88				0
02	WG85685-LCS	WG85685-2	128				0
03	WG85685-LCSD	WG85685-3	125				0
04	OC-GW-83D-XXX	SD7287-1	96				0
05	OC-GW-83M-XXX	SD7287-2	101				0
06	OC-GW-83S-XXX	SD7287-3	104				0
07	OC-GW-87D-XXX	SD7287-4	107				0
08	OC-GW-402D-XXX	SD7363-1	104				0
09	OC-GW-401D-XXX	SD7363-2	105				0
10	OC-MP-5#03-XXX	SD7287-5	110				0
11	WG86508-BLANK	WG86508-1	92				0
12	WG86508-LCS	WG86508-2	100				0
13	WG86508-LCSD	WG86508-3	108				0
14	OC-SW-PZ-16RR-XXX	WG86508-6	96				0
15	OC-SW-PZ-16RR-XXX	SD7693-1	103				0
16	OC-SW-PZ-17RR-XXX	SD7693-2	105				0
17	OC-SW-SD-1-XXX	SD7693-3	107				0
18	OC-EBK-016	SD7693-4	106				0
19	OC-SW-ISCO-1-DUP	SD7693-5	106				0
20	OC-SW-ISCO-2-XXX	SD7693-7	108				0
21	OC-SW-ISCO-1-XXX	SD7693-6	108				0
22	OC-SW-ISCO-1-XXXMS	WG86508-4	132*				1
23	OC-SW-ISCO-1-XXXMSD	WG86508-5	118				0
24							
25							
26							
27							
28							

QC LIMITS  
(70-130)

SMC1      = diethylformamide

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG85685-2 & WG85685-3  
Project: RI Analytical - Wilmington Client ID: WG85685-LCS & WG85685-LCSD  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 12/01/10 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG85685  
Matrix: WATER Units: mg/L

COMPOUND	LCS	LCSD	SAMPLE	LCS	LCSD	LCS	LCSD	%RPD	QC.	
	SPIKE	SPIKE	CONC.	CONC.	CONC.	%REC.	%REC.	%RPD	LIMIT	LIMITS
dimethylformamide	0.10	0.10	NA	0.10	0.10	99	98	1	30	70-130

KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG86508-2 & WG86508-3  
Project: RI Analytical - Wilmington Client ID: WG86508-LCS & WG86508-LCSD  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 12/21/10 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG86508  
Matrix: WATER Units: mg/L

COMPOUND	LCS	LCSD	SAMPLE	LCS	LCSD	LCS	LCSD	%RPD	QC.	
	SPIKE	SPIKE	CONC.	CONC.	CONC.	%REC.	%REC.	%RPD	LIMIT	LIMITS
dimethylformamide	0.10	0.10	NA	0.10	0.11	95	110	14	30	70-130

**KATAHDIN ANALYTICAL SERVICES**  
**MATRIX SPIKE/MATRIX DUPLICATE RECOVERY**

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/10/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 12/21/10  
Report Date: 01/07/2011  
Matrix: WATER

Lab ID: WG86508-4 & WG86508-5  
Client ID: OC-SW-ISCO-1-XXXMS & OC-SW-ISCO-1-XXXMSD  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD %RPD	QC. LIMIT	QC. LIMITS
dimethylformamide	0.10	0.10	0.00	0.10	0.12	104	115	10	30	70-130

FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG85685-BLANK

Project: RI ANALYTICAL - WILMINGTON      SDG No.: WIL-16

Lab File ID: BDL2003      Lab Sample ID: WG85685-1

Date Analyzed: 12/01/10      Time Analyzed: 0820

GC Column: STABILWAX ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG85685-LCS	WG85685-2	BDL2004	12/01/10	0834
02	WG85685-LCSD	WG85685-3	BDL2005	12/01/10	0848
03	OC-GW-83D-XXX	SD7287-1	BDL2006	12/01/10	0942
04	OC-GW-83M-XXX	SD7287-2	BDL2007	12/01/10	0956
05	OC-GW-83S-XXX	SD7287-3	BDL2008	12/01/10	1010
06	OC-GW-87D-XXX	SD7287-4	BDL2009	12/01/10	1025
07	OC-GW-402D-XXX	SD7363-1	BDL2010	12/01/10	1039
08	OC-GW-401D-XXX	SD7363-2	BDL2011	12/01/10	1053
09	OC-MP-5#03-XXX	SD7287-5	BDL2012	12/01/10	1108
10					
11					
12					
13					
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COMMENTS:

FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

WG86508-BLANK
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Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON      SDG No.: WIL-16

Lab File ID: BDL2120      Lab Sample ID: WG86508-1

Date Analyzed: 12/21/10      Time Analyzed: 1300

GC Column: STABILWAX ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 WG86508-LCS	WG86508-2	BDL2121	12/21/10	1314
02 WG86508-LCSD	WG86508-3	BDL2122	12/21/10	1329
03 OC-SW-PZ-16RR-XXX	WG86508-6	BDL2123	12/21/10	1347
04 OC-SW-PZ-16RR-XXX	SD7693-1	BDL2124	12/21/10	1401
05 OC-SW-PZ-17RR-XXX	SD7693-2	BDL2125	12/21/10	1416
06 OC-SW-SD-1-XXX	SD7693-3	BDL2126	12/21/10	1430
07 OC-EBK-016	SD7693-4	BDL2127	12/21/10	1444
08 OC-SW-ISCO-1-DUP	SD7693-5	BDL2128	12/21/10	1459
09 OC-SW-ISCO-2-XXX	SD7693-7	BDL2129	12/21/10	1513
10 OC-SW-ISCO-1-XXX	SD7693-6	BDL2131	12/21/10	1542
11 OC-SW-ISCO-1-XXXMS	WG86508-4	BDL2132	12/21/10	1556
12 OC-SW-ISCO-1-XXXMSD	WG86508-5	BDL2133	12/21/10	1610
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COMMENTS:

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FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date(s): 11/17/10 11/17/10

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 1515 1641

LAB FILE ID: RF0.02: BDK2114 RF0.05: BDK2115 RF0.1: BDK2116  
RF0.25: BDK2117 RF0.5: BDK2118 RF1: BDK2120

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		%RSD	MAX %RSD
								A0	A1		
dimethylformamide	8938	27041	53683	149920	289500	576810	LINR	1.553e-003	1.726e-006	0.99979	0.99000
diethylformamide	81674	194730	379020	1096700	1662900		LINR	4.383e-002	2.325e-006	0.99849	0.99000

FORM VI DMF

FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date(s): 12/21/10 12/21/10

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 1049 1230

LAB FILE ID: RF0.02: BDL2112 RF0.05: BDL2113 RF0.1: BDL2114  
RF0.25: BDL2115 RF0.5: BDL2116 RF1: BDL2118

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		%RSD	MAX %RSD
								A0	A1		
dimethylformamide	7122	17178	42246	103000	192620	417020	LINR	4.941e-003	2.415e-006	0.99866	0.99000
diethylformamide	63284	117320	252640	713810	1106400		LINR	3.453e-002	3.558e-006	0.99890	0.99000

FORM VI DMF

FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date(s): 12/21/10 12/21/10

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 1049 1230

RFO.005: BDL2111

COMPOUND	RFO.005	CURVE	COEFFICIENTS		%RSD	MAX %RSD
			A0	A1		
dimethylformamide_____	1402	LINR	4.941e-003	2.415e-006	0.99866	0.99000
diethylformamide_____	25393	LINR	3.453e-002	3.558e-006	0.99890	0.99000

FORM VI DMF

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/01/10 Time: 0801

Lab File ID: BDL2002 Init. Calib. Date(s): 11/17/10 11/17/10

Init. Calib. Times: 1515 1641

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2577500	0.2500000	593620.00	0.01	3.10	25.00	LINR
diethylformamide	2.5756000	2.5000000	435540.00	0.01	3.02	25.00	LINR

FORM VII PEST

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/01/10 Time: 1125

Lab File ID: BDL2013 Init. Calib. Date(s): 11/17/10 11/17/10

Init. Calib. Times: 1515 1641

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2694800	0.2500000	620800.00	0.01	7.79	25.00	LINR
diethylformamide	2.8256000	2.5000000	478540.00	0.01	13.02	25.00	LINR

FORM VII PEST

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/21/10 Time: 1527

Lab File ID: BDL2130 Init. Calib. Date(s): 12/21/10 12/21/10

Init. Calib. Times: 1049 1230

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2731600	0.2500000	444160.00	0.01	9.26	25.00	LINR
diethylformamide	2.9402000	2.5000000	326660.00	0.01	17.61	25.00	LINR

FORM VII PEST

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/21/10 Time: 1625

Lab File ID: BDL2134 Init. Calib. Date(s): 12/21/10 12/21/10

Init. Calib. Times: 1049 1230

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2847400	0.2500000	463340.00	0.01	13.90	25.00	LINR
diethylformamide	2.9260000	2.5000000	325070.00	0.01	17.04	25.00	LINR

FORM VII PEST

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 11/17/10 11/17/10

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 4.59				S1	
CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	ICAL 0.02	11/17/10	1515	4.56	_____
02	ICAL 0.05	11/17/10	1530	4.57	_____
03	ICAL 0.1	11/17/10	1544	4.57	_____
04	ICAL 0.25	11/17/10	1558	4.59	_____
05	ICAL 0.5	11/17/10	1612	4.59	_____
06	ICAL 1.0	11/17/10	1641	_____	_____
07	CV 0.25	12/01/10	0801	4.60	_____
08	WG85685-BLAN	WG85685-1	12/01/10	0820	4.60
09	WG85685-LCS	WG85685-2	12/01/10	0834	4.61
10	WG85685-LCSD	WG85685-3	12/01/10	0848	4.61
11	OC-GW-83D-XX	SD7287-1	12/01/10	0942	4.61
12	OC-GW-83M-XX	SD7287-2	12/01/10	0956	4.60
13	OC-GW-83S-XX	SD7287-3	12/01/10	1010	4.60
14	OC-GW-87D-XX	SD7287-4	12/01/10	1025	4.60
15	OC-GW-402D-X	SD7363-1	12/01/10	1039	4.60
16	OC-GW-401D-X	SD7363-2	12/01/10	1053	4.60
17	OC-MP-5#03-X	SD7287-5	12/01/10	1108	4.60
18		CV 0.25	12/01/10	1125	4.60
19					
20					

QC LIMITS  
S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 12/21/10 12/21/10

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 4.53				S1		
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		ICAL 0.005	12/21/10	1049	4.55	
02		ICAL 0.02	12/21/10	1104	4.55	
03		ICAL 0.05	12/21/10	1118	4.53	
04		ICAL 0.1	12/21/10	1133	4.55	
05		ICAL 0.25	12/21/10	1147	4.53	
06		ICAL 0.5	12/21/10	1202	4.53	
07		ICAL 1.0	12/21/10	1230		
08	WG86508-BLAN	WG86508-1	12/21/10	1300	4.53	
09	WG86508-LCS	WG86508-2	12/21/10	1314	4.55	
10	WG86508-LCSD	WG86508-3	12/21/10	1329	4.55	
11	OC-SW-PZ-16R	WG86508-6	12/21/10	1347	4.55	
12	OC-SW-PZ-16R	SD7693-1	12/21/10	1401	4.55	
13	OC-SW-PZ-17R	SD7693-2	12/21/10	1416	4.55	
14	OC-SW-SD-1-X	SD7693-3	12/21/10	1430	4.56	
15	OC-EBK-016	SD7693-4	12/21/10	1444	4.55	
16	OC-SW-ISCO-1	SD7693-5	12/21/10	1459	4.55	
17	OC-SW-ISCO-2	SD7693-7	12/21/10	1513	4.55	
18		CV 0.25	12/21/10	1527	4.55	
19	OC-SW-ISCO-1	SD7693-6	12/21/10	1542	4.55	
20	OC-SW-ISCO-1	WG86508-4	12/21/10	1556	4.55	

QC LIMITS  
S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 12/21/10 12/21/10

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 4.53						
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	OC-SW-ISCO-1	WG86508-5	12/21/10	1610	4.55	
02		CV 0.25	12/21/10	1625	4.55	
03						
04						
05						
06						
07						
08						
09						
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11						
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13						
14						
15						
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17						
18						
19						
20						

QC LIMITS  
S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

# **DMF DATA**

## **QC Summary Section**

FORM 2  
WATER DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON      SDG No.: WIL-16

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4 #	TOT OUT
01	WG85685-BLANK	WG85685-1	88				0
02	WG85685-LCS	WG85685-2	128				0
03	WG85685-LCSD	WG85685-3	125				0
04	OC-GW-83D-XXX	SD7287-1	96				0
05	OC-GW-83M-XXX	SD7287-2	101				0
06	OC-GW-83S-XXX	SD7287-3	104				0
07	OC-GW-87D-XXX	SD7287-4	107				0
08	OC-GW-402D-XXX	SD7363-1	104				0
09	OC-GW-401D-XXX	SD7363-2	105				0
10	OC-MP-5#03-XXX	SD7287-5	110				0
11	WG86508-BLANK	WG86508-1	92				0
12	WG86508-LCS	WG86508-2	100				0
13	WG86508-LCSD	WG86508-3	108				0
14	OC-SW-PZ-16RR-XXX	WG86508-6	96				0
15	OC-SW-PZ-16RR-XXX	SD7693-1	103				0
16	OC-SW-PZ-17RR-XXX	SD7693-2	105				0
17	OC-SW-SD-1-XXX	SD7693-3	107				0
18	OC-EBK-016	SD7693-4	106				0
19	OC-SW-ISCO-1-DUP	SD7693-5	106				0
20	OC-SW-ISCO-2-XXX	SD7693-7	108				0
21	OC-SW-ISCO-1-XXX	SD7693-6	108				0
22	OC-SW-ISCO-1-XXXMS	WG86508-4	132*				1
23	OC-SW-ISCO-1-XXMSD	WG86508-5	118				0
24							
25							
26							
27							
28							

QC LIMITS  
(70-130)

SMC1      = diethylformamide

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG85685-BLANK

Project: RI ANALYTICAL - WILMINGTON      SDG No.: WIL-16

Lab File ID: BDL2003      Lab Sample ID: WG85685-1

Date Analyzed: 12/01/10      Time Analyzed: 0820

GC Column: STABILWAX ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 WG85685-LCS	WG85685-2	BDL2004	12/01/10	0834
02 WG85685-LCSD	WG85685-3	BDL2005	12/01/10	0848
03 OC-GW-83D-XXX	SD7287-1	BDL2006	12/01/10	0942
04 OC-GW-83M-XXX	SD7287-2	BDL2007	12/01/10	0956
05 OC-GW-83S-XXX	SD7287-3	BDL2008	12/01/10	1010
06 OC-GW-87D-XXX	SD7287-4	BDL2009	12/01/10	1025
07 OC-GW-402D-XXX	SD7363-1	BDL2010	12/01/10	1039
08 OC-GW-401D-XXX	SD7363-2	BDL2011	12/01/10	1053
09 OC-MP-5#03-XXX	SD7287-5	BDL2012	12/01/10	1108
10				
11				
12				
13				
14				
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COMMENTS:

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FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG86508-BLANK

Project: RI ANALYTICAL - WILMINGTON      SDG No.: WIL-16

Lab File ID: BDL2120      Lab Sample ID: WG86508-1

Date Analyzed: 12/21/10      Time Analyzed: 1300

GC Column: STABILWAX ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 WG86508-LCS	WG86508-2	BDL2121	12/21/10	1314
02 WG86508-LCSD	WG86508-3	BDL2122	12/21/10	1329
03 OC-SW-PZ-16RR-XXX	WG86508-6	BDL2123	12/21/10	1347
04 OC-SW-PZ-16RR-XXX	SD7693-1	BDL2124	12/21/10	1401
05 OC-SW-PZ-17RR-XXX	SD7693-2	BDL2125	12/21/10	1416
06 OC-SW-SD-1-XXX	SD7693-3	BDL2126	12/21/10	1430
07 OC-EBK-016	SD7693-4	BDL2127	12/21/10	1444
08 OC-SW-ISCO-1-DUP	SD7693-5	BDL2128	12/21/10	1459
09 OC-SW-ISCO-2-XXX	SD7693-7	BDL2129	12/21/10	1513
10 OC-SW-ISCO-1-XXX	SD7693-6	BDL2131	12/21/10	1542
11 OC-SW-ISCO-1-XXXMS	WG86508-4	BDL2132	12/21/10	1556
12 OC-SW-ISCO-1-XXMSD	WG86508-5	BDL2133	12/21/10	1610
13				
14				
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COMMENTS:

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 11/17/10 11/17/10

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 4.59		CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED
				S1 RT #	RT #
01			ICAL 0.02	11/17/10	1515
02			ICAL 0.05	11/17/10	1530
03			ICAL 0.1	11/17/10	1544
04			ICAL 0.25	11/17/10	1558
05			ICAL 0.5	11/17/10	1612
06			ICAL 1.0	11/17/10	1641
07			CV 0.25	12/01/10	0801
08	WG85685-BLAN	WG85685-1		12/01/10	0820
09	WG85685-LCS	WG85685-2		12/01/10	0834
10	WG85685-LCSD	WG85685-3		12/01/10	0848
11	OC-GW-83D-XX	SD7287-1		12/01/10	0942
12	OC-GW-83M-XX	SD7287-2		12/01/10	0956
13	OC-GW-83S-XX	SD7287-3		12/01/10	1010
14	OC-GW-87D-XX	SD7287-4		12/01/10	1025
15	OC-GW-402D-X	SD7363-1		12/01/10	1039
16	OC-GW-401D-X	SD7363-2		12/01/10	1053
17	OC-MP-5#03-X	SD7287-5		12/01/10	1108
18		CV 0.25		12/01/10	1125
19					
20					

QC LIMITS  
S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 12/21/10 12/21/10

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 4.53				S1		
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		ICAL 0.005	12/21/10	1049	4.55	
02		ICAL 0.02	12/21/10	1104	4.55	
03		ICAL 0.05	12/21/10	1118	4.53	
04		ICAL 0.1	12/21/10	1133	4.55	
05		ICAL 0.25	12/21/10	1147	4.53	
06		ICAL 0.5	12/21/10	1202	4.53	
07		ICAL 1.0	12/21/10	1230		
08	WG86508-BLAN	WG86508-1	12/21/10	1300	4.53	
09	WG86508-LCS	WG86508-2	12/21/10	1314	4.55	
10	WG86508-LCSD	WG86508-3	12/21/10	1329	4.55	
11	OC-SW-PZ-16R	WG86508-6	12/21/10	1347	4.55	
12	OC-SW-PZ-16R	SD7693-1	12/21/10	1401	4.55	
13	OC-SW-PZ-17R	SD7693-2	12/21/10	1416	4.55	
14	OC-SW-SD-1-X	SD7693-3	12/21/10	1430	4.56	
15	OC-EBK-016	SD7693-4	12/21/10	1444	4.55	
16	OC-SW-ISCO-1	SD7693-5	12/21/10	1459	4.55	
17	OC-SW-ISCO-2	SD7693-7	12/21/10	1513	4.55	
18		CV 0.25	12/21/10	1527	4.55	
19	OC-SW-ISCO-1	SD7693-6	12/21/10	1542	4.55	
20	OC-SW-ISCO-1	WG86508-4	12/21/10	1556	4.55	

QC LIMITS

S1 = diethylformamide      (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.

\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

GC Column: STABILWAX ID: 0.53 (mm) Init. Calib. Date(s): 12/21/10 12/21/10

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 4.53					
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01	OC-SW-ISCO-1	WG86508-5	12/21/10	1610	4.55
02		CV 0.25	12/21/10	1625	4.55
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

QC LIMITS  
S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

## **Sample Data Section**

## KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a greater rate for false negatives, i.e. greater than 1%, than those results reported as "U" PQL/LOQ or "U" LOD.

- \* Compound recovery outside of quality control limits.

- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

- J Used for Pesticide/Aroclor analyte when there is a greater than 40% difference for detected concentrations between the two GC columns.

- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

- N Presumptive evidence of a compound based on a mass spectral library search.

- A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

- P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

# Katahdin Analytical Services, Inc.

## **Manual Integration Codes For GC/MS, GC, HPLC and/or IC**

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation                          Lab ID: SD7287-1  
Project: RI Analytical - Wilmington              Client ID: OC-GW-83D-XXX  
PO No:    SDG: WIL-16  
Sample Date: 11/18/10                              Extracted by:  
Received Date: 11/19/10                           Extraction Method: 8033M  
Extraction Date:                                      Analyst: JLP  
Analysis Date: 01-DEC-2010 09:42                   Analysis Method: SW846 8033M  
Report Date: 01/07/2011                              Lab Prep Batch: WG85685  
Matrix: WATER                                        Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide		0.23	1.0	0.020	0.020	0.0031
	diethylformamide		96%				

Page      01 of 01      BDL2006.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2006.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2006.d  
Lab Smp Id: SD7287-1 Client Smp ID: OC-GW-83D-XXX  
Inj Date : 01-DEC-2010 09:42  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,SD7287-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.b\dmfb049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	( mg/L)		
1 dimethylformamide	3.613	3.600	0.013	130548	0.22692	0.227(M)	MS	
\$ 2 diethylformamide	4.613	4.600	0.013	188853	0.48294	0.483		

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\ge\chem\gcl1.i\GC14nL01B1.b\BDL2006.d

Date : 01-DEC-2010 09:42

Client ID: 0C-GH-83D-KKK

Sample Info: DHFB049A.M,GC14nL01B1.B,1,SD7287-1

Purge Volume: 0.0

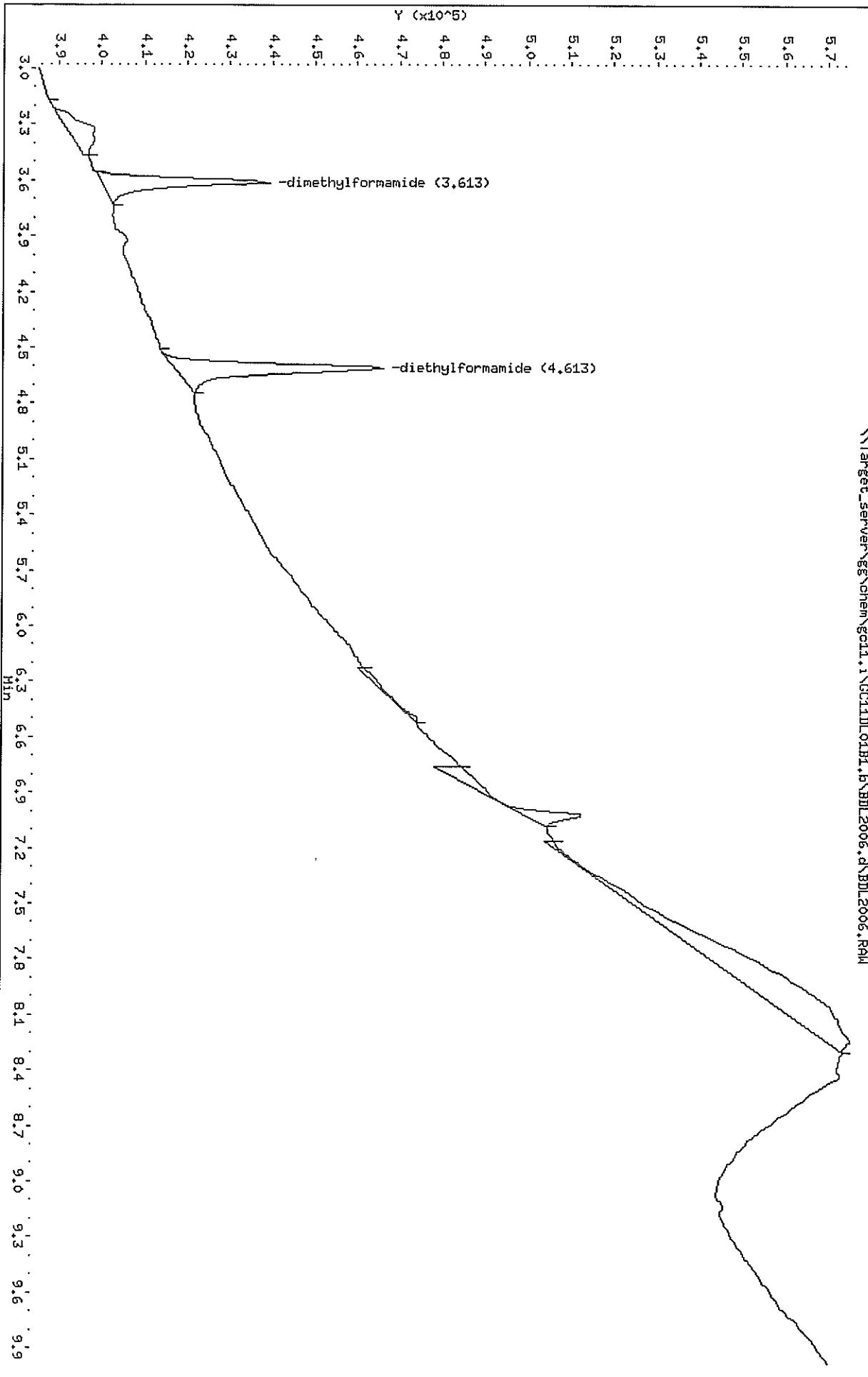
Column phase: Stabilux

Instrument: gcl1.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\ge\chem\gcl1.i\GC14nL01B1.b\BDL2006.d\BDL2006.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/18/10  
Received Date: 11/19/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 09:56  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7287-2  
Client ID: OC-GW-83M-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		101%				

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Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2007.d  
Lab Smp Id: SD7287-2 Client Smp ID: OC-GW-83M-XXX  
Inj Date : 01-DEC-2010 09:56  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,SD7287-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: TARGET\_SERVER

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	( mg/L)						
\$ 2 diethylformamide	RT	EXP RT	DLT RT	RESPONSE			M5	
	4.600	4.600	0.000	198865	0.50622	0.506(M)		

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\Target\_server\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2007.d  
Date : 01-DEC-2010 09:56

Client ID: DC-GL-B3H-NKX  
Sample Info: DHF-B049A.H,GC11D\\01B1.B,1,SD7287-2

Purge Volume: 0.0

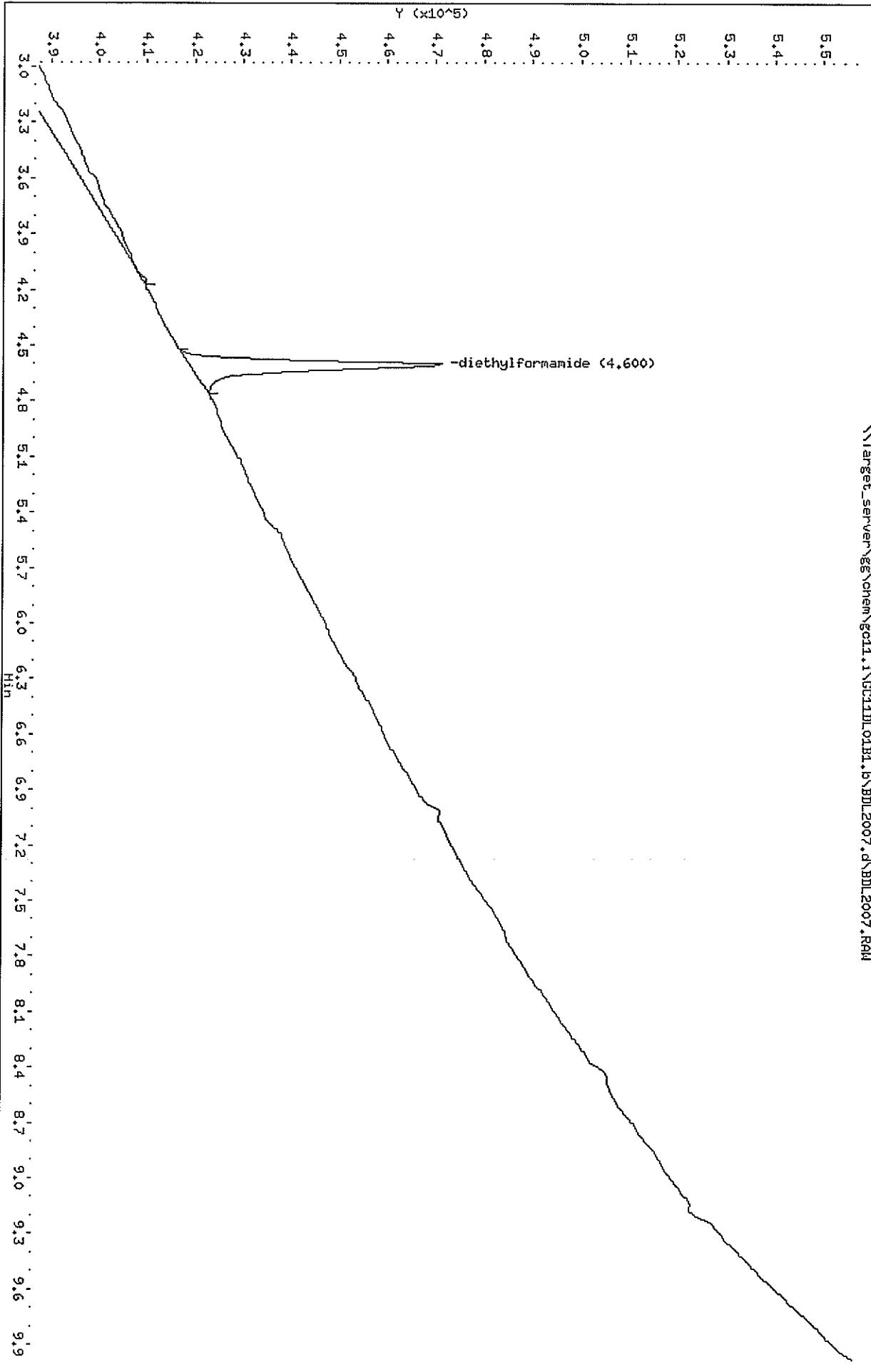
Column Phase: Stabilux

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2007.d\\BDL2007.RAW



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/18/10  
Received Date: 11/19/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 10:10  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7287-3  
Client ID: OC-GW-83S-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		104%				

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Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2008.d  
Lab Smp Id: SD7287-3 Client Smp ID: OC-GW-83S-XXX  
Inj Date : 01-DEC-2010 10:10  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,SD7287-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: TARGET\_SERVER

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	( mg/L)						
\$ 2 diethylformamide	4.600	4.600	0.000	204279	0.51881	0.519		

Data File: \\Target\_server\\gg\\chen\\gc11.i\\GC11D\\01B1.b\\BDL2008.d  
Date : 01-DEC-2010 10:10

Client ID: DC-014-B35 XXX

Sample Info: DHFBo49A.H,GC11D\\01B1.B,1,SD7287-3

Purge Volume: 0.0

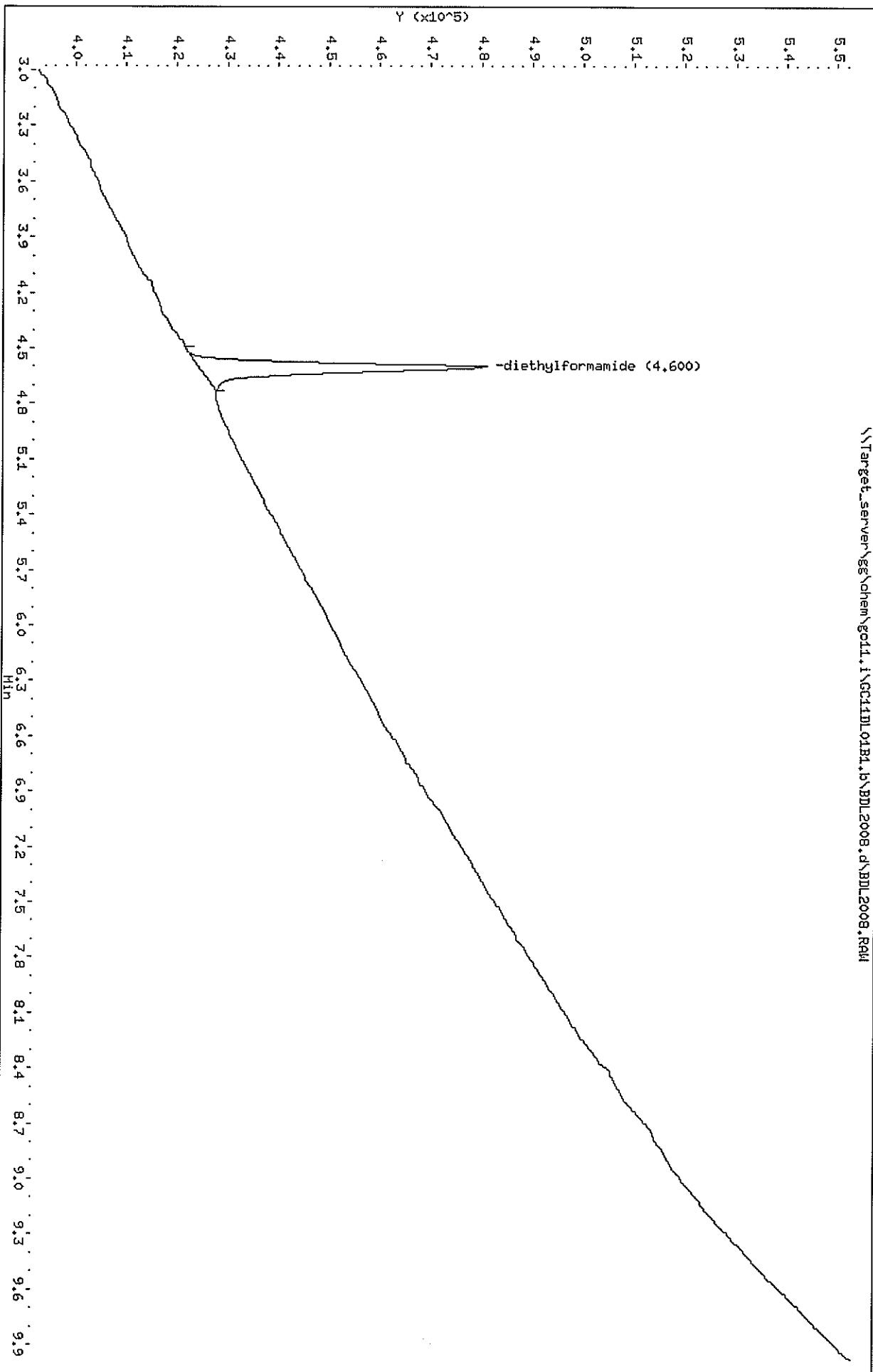
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chen\\gc11.i\\GC11D\\01B1.b\\BDL2008.d\\BDL2008.RAW



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/17/10  
Received Date: 11/19/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 10:25  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7287-4  
Client ID: OC-GW-87D-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		107%				

Page 01 of 01 BDL2009.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2009.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2009.d  
Lab Smp Id: SD7287-4 Client Smp ID: OC-GW-87D-XXX  
Inj Date : 01-DEC-2010 10:25  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,SD7287-4  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: TARGET\_SERVER

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN ( mg/L)	FINAL ( mg/L)	
\$ 2 diethylformamide	4.600	4.600	0.000	211635	0.53592	0.536	

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11DL01B1.b\\BDL2009.d

Date : 01-DEC-2010 10:25

Client ID: DC-GW-B77-KKK

Sample Info: BHFB049A.H,GC11DL01B1.B,1,SD7287-4

Purge Volume: 0.0

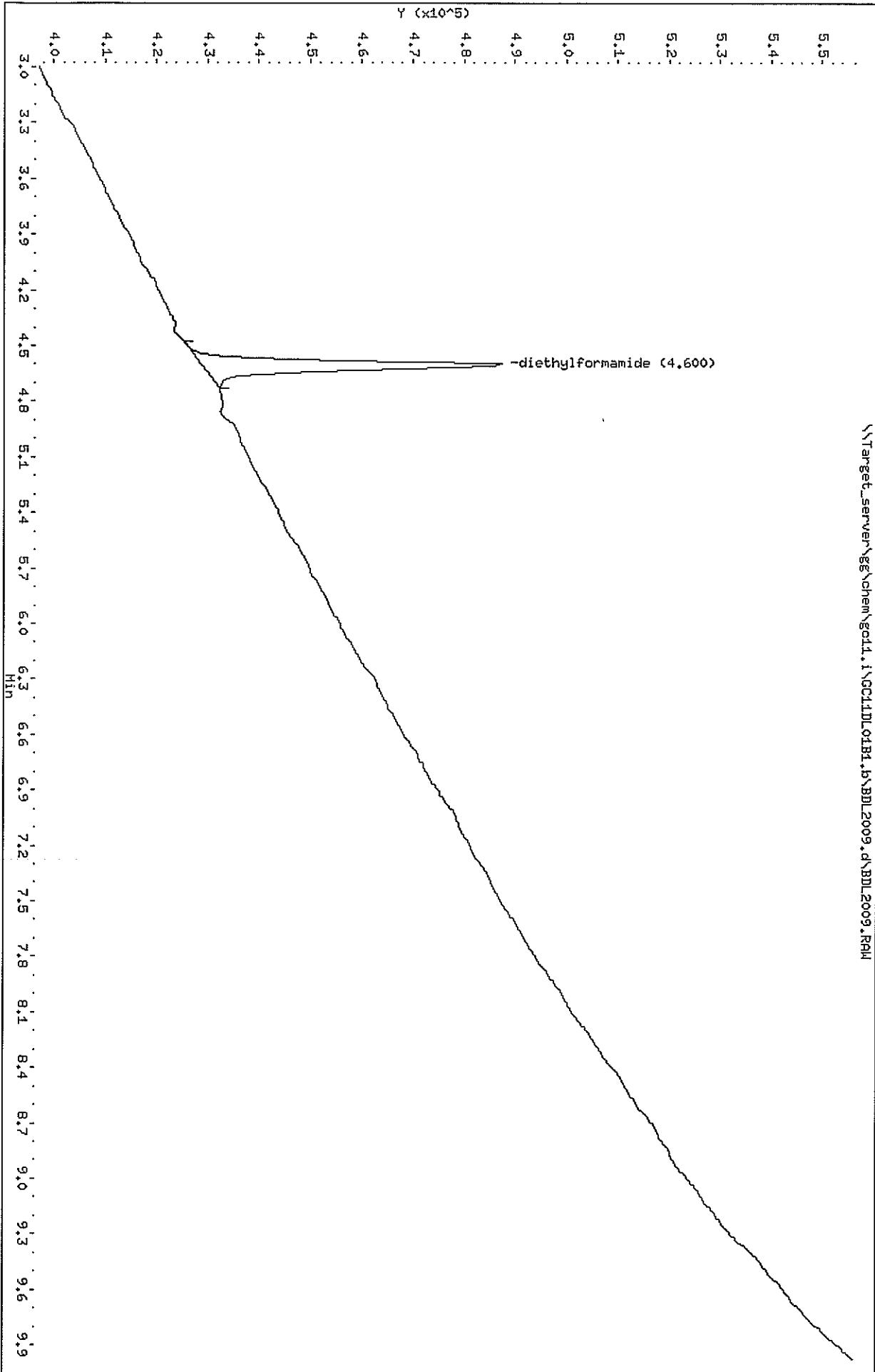
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11DL01B1.b\\BDL2009.d\\BDL2009.Raw



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation                                  Lab ID: SD7287-5  
Project: RI Analytical - Wilmington                      Client ID: OC-MP-5#03-XXX  
PO No:    SDG: WIL-16  
Sample Date: 11/19/10                                    Extracted by:  
Received Date: 11/19/10                                Extraction Method: 8033M  
Extraction Date:     Analyst: JLP  
Analysis Date: 01-DEC-2010 11:08                        Analysis Method: SW846 8033M  
Report Date: 01/07/2011                                Lab Prep Batch: WG85685  
Matrix: WATER    Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide		0.020	1.0	0.020	0.020	0.0031
	diethylformamide			110%			

Page      01 of 01      BDL2012.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2012.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2012.d  
Lab Smp Id: SD7287-5 Client Smp ID: OC-MP-5#03-XXX  
Inj Date : 01-DEC-2010 11:08  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,SD7287-5  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: TARGET\_SERVER

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	( mg/L)					
1 dimethylformamide	RT	EXP RT	DLT RT	RESPONSE			
	====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.613	3.600	0.013	10725	0.02007	0.0201	
\$ 2 diethylformamide	4.600	4.600	0.000	217227	0.54892	0.549	

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11D01B1.b\\BDL2012.d  
Date : 01-DEC-2010 11:08

Client ID: 0C-HP-5#J3-KKR  
Sample Info: DHFB049A.M\\GC11D01B1.B,1,SD7287-5

Purge Volume: 0.0

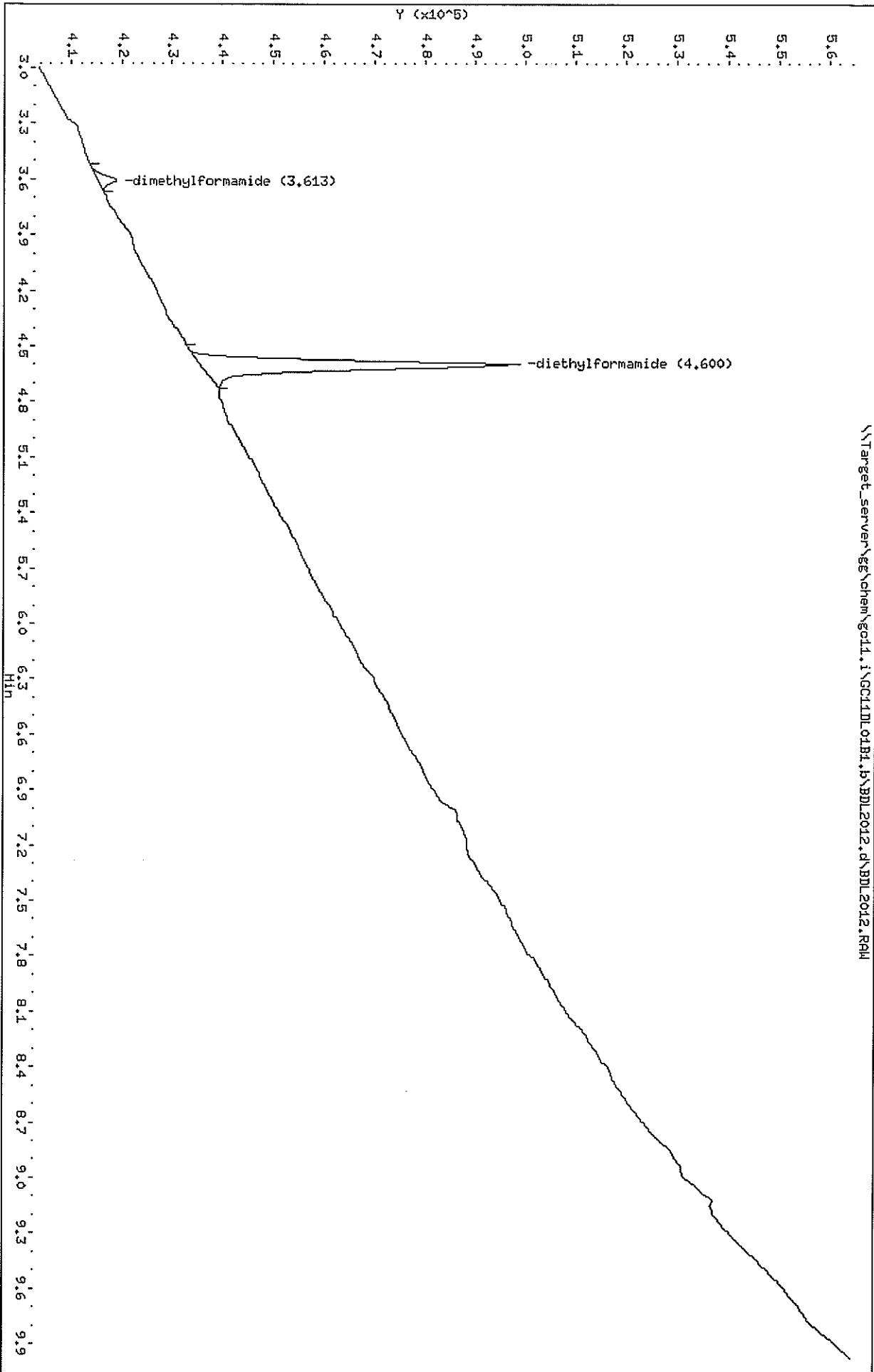
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11D01B1.b\\BDL2012.d\\BDL2012.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/23/10  
Received Date: 11/24/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 10:39  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7363-1  
Client ID: OC-GW-402D-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		104%				

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Data File: \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2010.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2010.d  
Lab Smp Id: SD7363-1 Client Smp ID: OC-GW-402D-XXX  
Inj Date : 01-DEC-2010 10:39  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,SD7363-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: TARGET\_SERVER

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	( mg/L)	
\$ 2 diethylformamide	4.600	4.600	0.000	205870	0.52251	0.522	

Data File: \\Target\_Server\\GC\\gc11.i\\GC11D\\01B1.b\\BDL2010.d  
Date : 01-DEC-2010 10:39  
Client ID: DC-Oil-402D-HKK

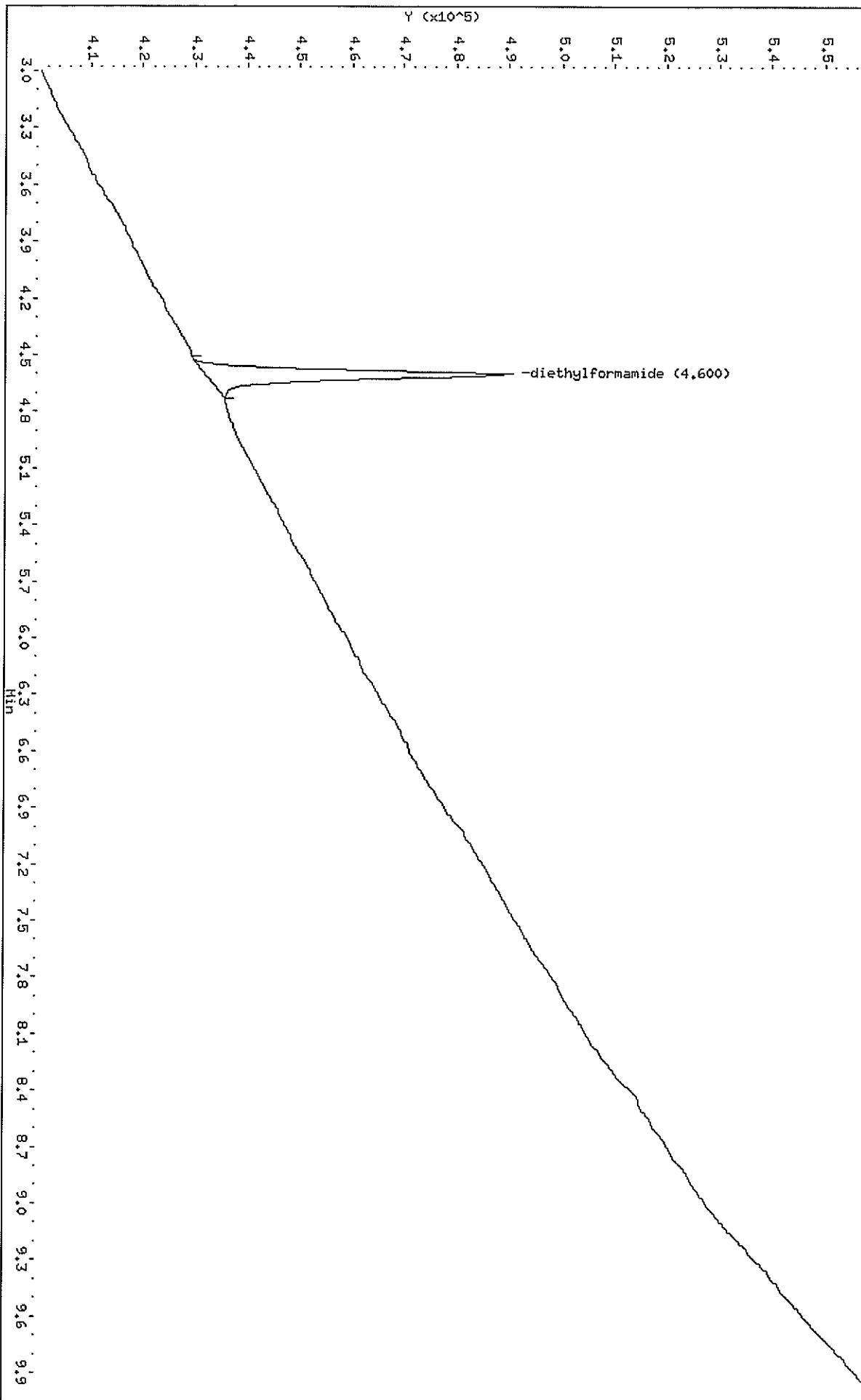
Sample Info: DHFB049A.H,GC11D\\01B1.B,1,SD7363-1  
Purge Volume: 0.0  
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_Server\\GC\\gc11.i\\GC11D\\01B1.b\\BDL2010.d\\BDL2010.RAW



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 11/22/10  
Received Date: 11/24/10  
Extraction Date:  
Analysis Date: 01-DEC-2010 10:53  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7363-2  
Client ID: OC-GW-401D-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG85685  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		105%				

Page 01 of 01 BDL2011.d

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2011.d  
Lab Smp Id: SD7363-2 Client Smp ID: OC-GW-401D-XXX  
Inj Date : 01-DEC-2010 10:53  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,SD7363-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: TARGET\_SERVER

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	( mg/L)						
\$ 2 diethylformamide	4.600	4.600	0.000	206529	0.52404	0.524 (M)	MS	

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

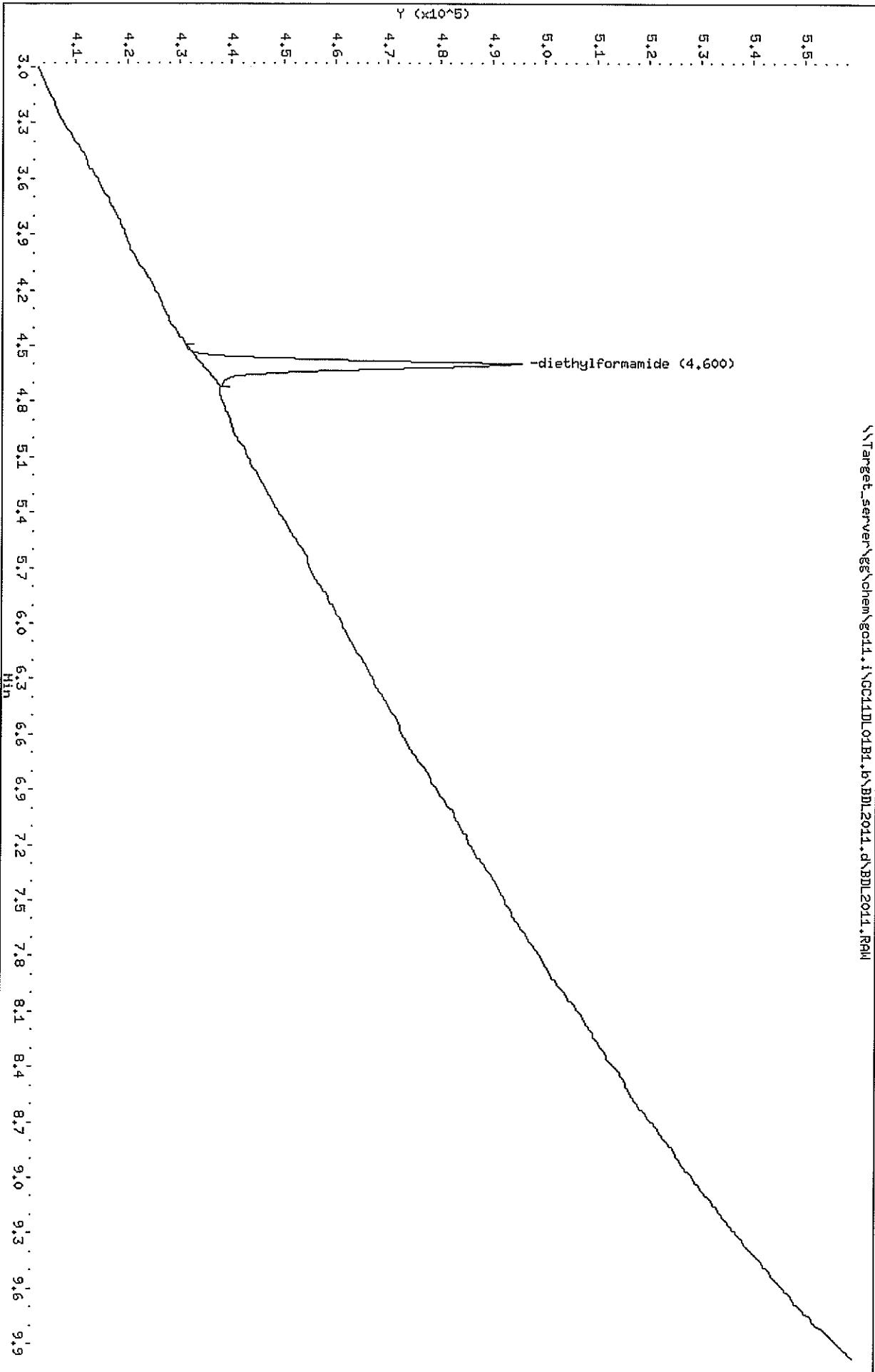
Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2011.d  
Date : 01-DEC-2010 10:53  
Client ID: DC-SIL-401B-KK

Sample Info: DHFBo49A.H,GC11D\\01B1.B,1,SD7363-2  
Purge Volume: 0.0  
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP  
Column diameter: 0.53

\\Target\_server\\gg\\chem\\go11.i\\GC11D\\01B1.b\\BDL2011.d\\BDL2011.RAW



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/09/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 14:01  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-1  
Client ID: OC-SW-PZ-16RR-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		103%				

Page 01 of 01 BDL2124.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2124.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2124.d  
Lab Smp Id: SD7693-1 Client Smp ID: OC-SW-PZ-16RR-XXX  
Inj Date : 21-DEC-2010 14:01  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,SD7693-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	( mg/L)		
\$ 2 diethylformamide	4.546	4.533	0.013	279848	1.03023	1.03 (M)	M4	

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\Target\_Server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2124.d  
Date : 21-DEC-2010 14:01

Client ID: DC-SL-PZ-16RR-KW  
Sample Info: DHFB051A.H,GC11D21B1.B,1,SD7693-1

Purge Volume: 0.0

Column Phase: Stabilwax

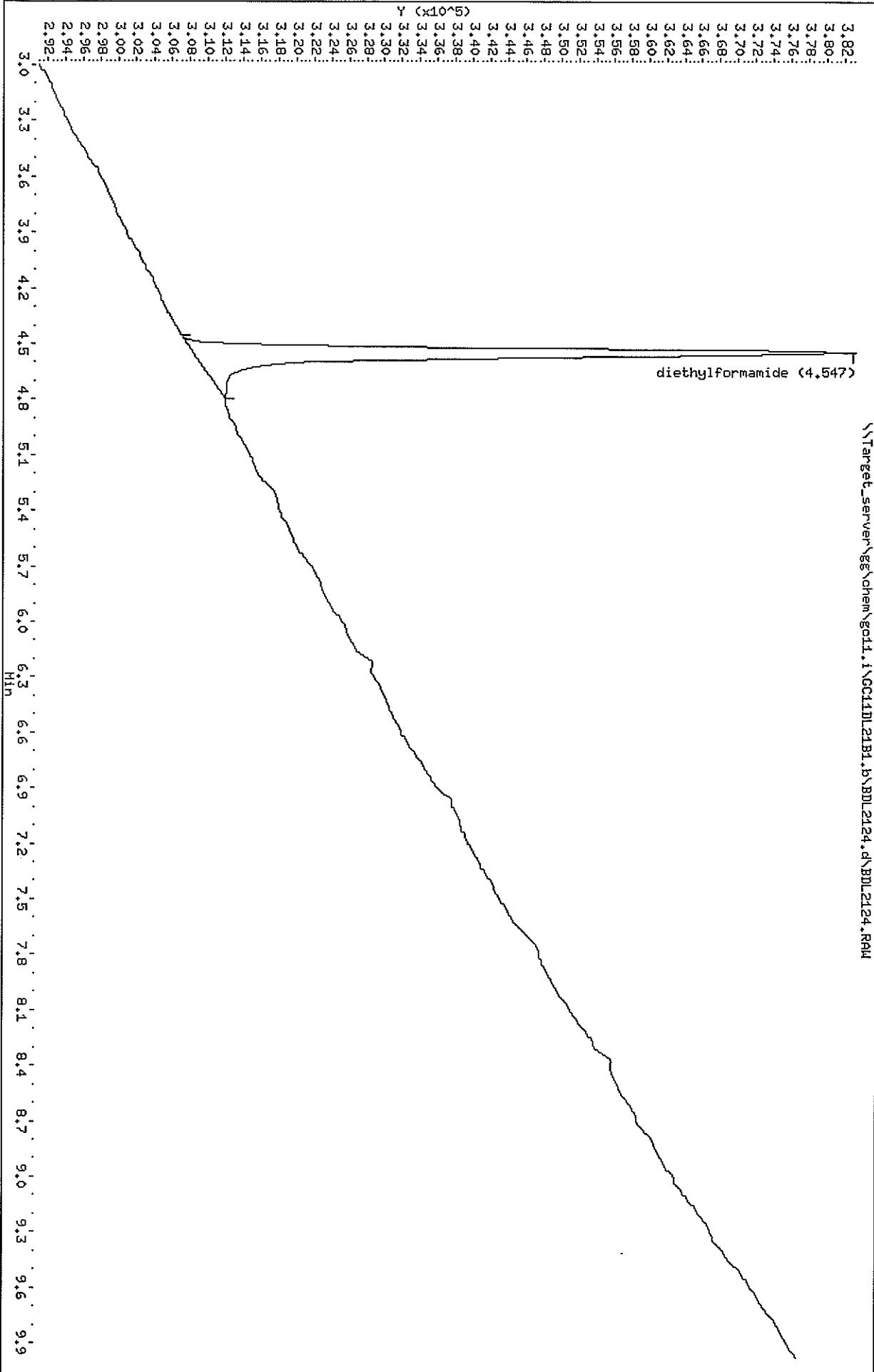
Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_Server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2124.d\\BDL2124.RAW

diethylformamide (4.547)



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation                                  Lab ID: WG86508-6  
Project: RI Analytical - Wilmington                    Client ID: OC-SW-PZ-16RR-XXX  
PO No:    SDG: WIL-16  
Sample Date: 12/09/10                                 Extracted by:  
Received Date: 12/10/10                               Extraction Method: 8033M  
Extraction Date:                                         Analyst: JLP  
Analysis Date: 21-DEC-2010 13:47                       Analysis Method: SW846 8033M  
Report Date: 01/07/2011                                Lab Prep Batch: WG86508  
Matrix: WATER    Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		96%				

Page      01 of 01      BDL2123.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2123.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2123.d  
Lab Smp Id: WG86508-6 Client Smp ID: OC-SW-PZ-16RR-XXX  
Inj Date : 21-DEC-2010 13:47  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,WG86508-6  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

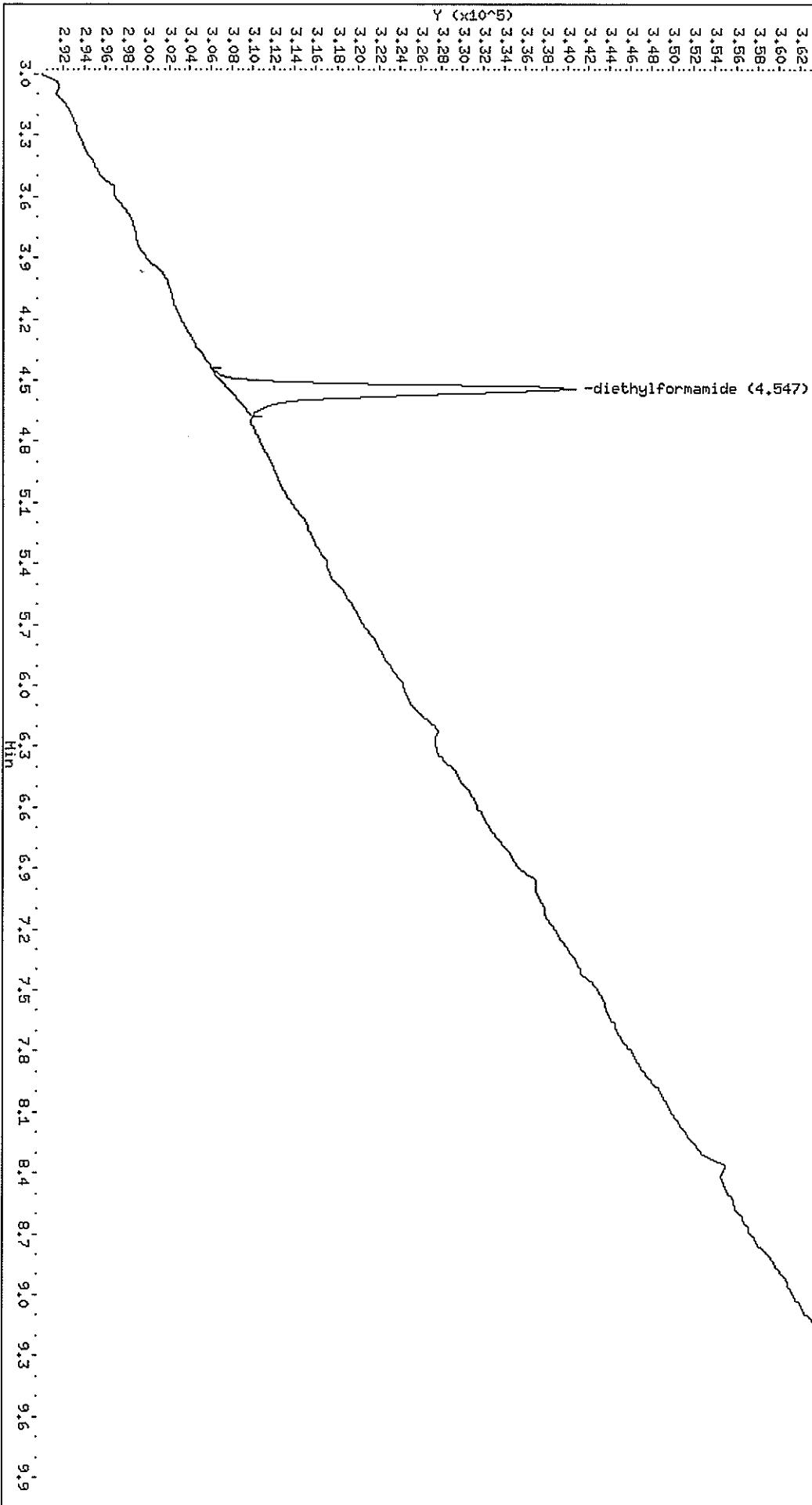
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	( mg/L)						
\$ 2 diethylformamide	4.546	4.533	0.013	124809	0.47860	0.479		

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2123.d  
Date : 24-DEC-2010 13:47  
Client ID: DC-SL-P2-16RR-KXX  
Sample Info: DMRB051A.H,GC11D21B1.B,1,10086508-6  
Purge Volume: 0.0  
Column Phase: Stabilwax

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2123.d\\BDL2123.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/10/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 14:16  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-2  
Client ID: OC-SW-PZ-17RR-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		105‡				

Page 01 of 01 BDL2125.d

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2125.d  
Lab Smp Id: SD7693-2 Client Smp ID: OC-SW-PZ-17RR-XXX  
Inj Date : 21-DEC-2010 14:16  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,SD7693-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS		REVIEW CODE
					( mg/L)	( mg/L)	
\$ 2 diethylformamide	4.546	4.533	0.013	285286	1.04958	1.05 (M)	M4

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2125.d  
Date : 21-DEC-2010 14:16  
Client ID: DC-Skl-PZ-47RR-KKK  
Sample Info: DMFB051A.H,GC11DL21B1.B,1,SD7693-2  
Purge Volume: 0.0

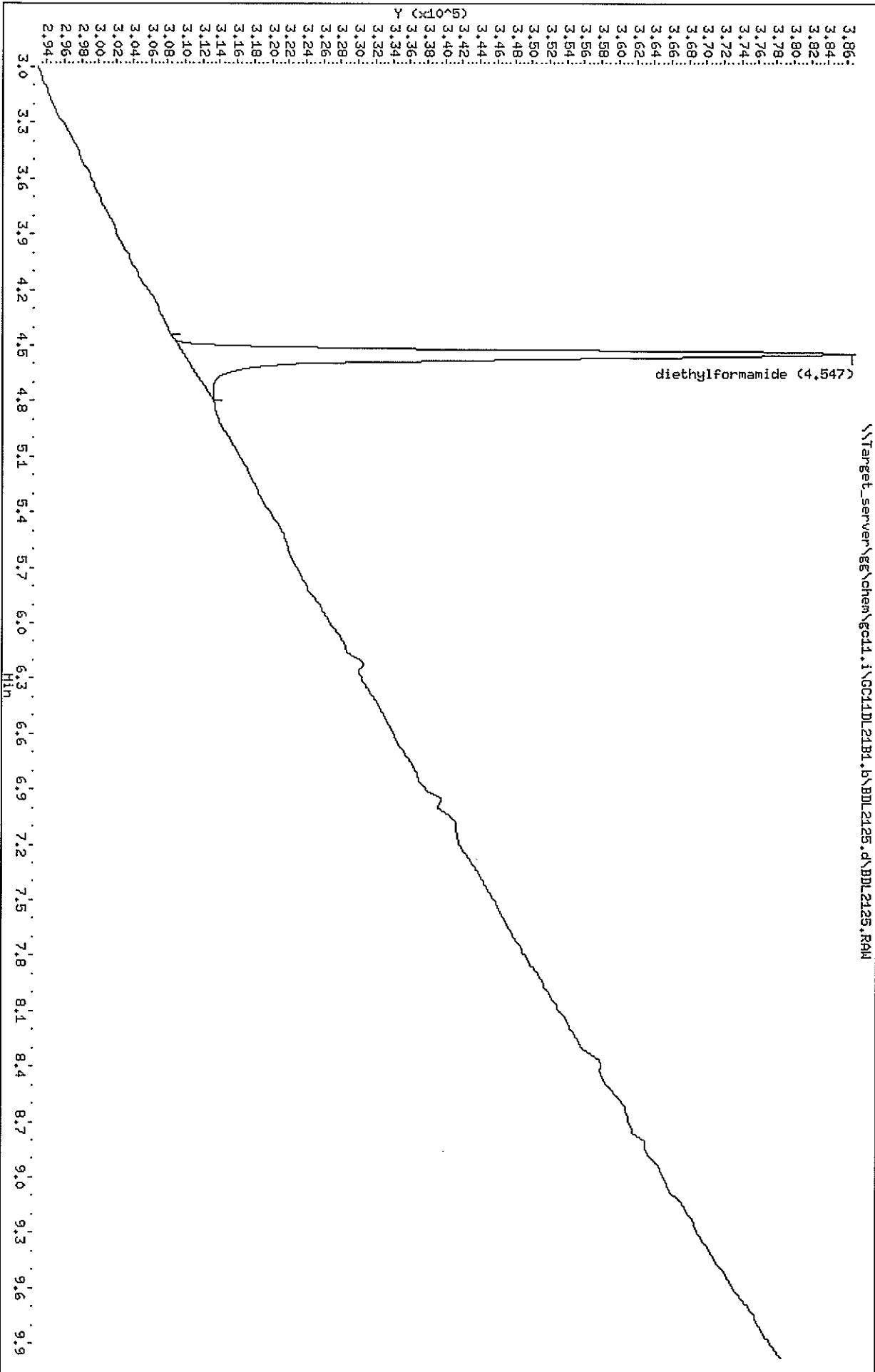
Column Phase: Stabilmax

Instrument: gc11.i

Operator: JLP  
Column diameter: 0.53

\\target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2125.d\BDL2125.RAW

diethylformamide (4.547)



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/09/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 14:30  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-3  
Client ID: OC-SW-SD-1-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		107%				

Page 01 of 01 BDL2126.d

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2126.d  
Lab Smp Id: SD7693-3 Client Smp ID: OC-SW-SD-1-XXX  
Inj Date : 21-DEC-2010 14:30  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,SD7693-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfb051a.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					( mg/L)	( mg/L)	
\$ 2 diethylformamide	4.560	4.533	0.027	290464	1.06800	1.07 (M)	M4

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11DL21B1.b\\BDL2126.d

Date : 24-DEC-2010 14:30

Client ID: DC-SM-SD-1-XXX

Sample Info: DHFB051a.H,GC11DL21B1.B,1,SD7693-3

Purge Volume: 0.0

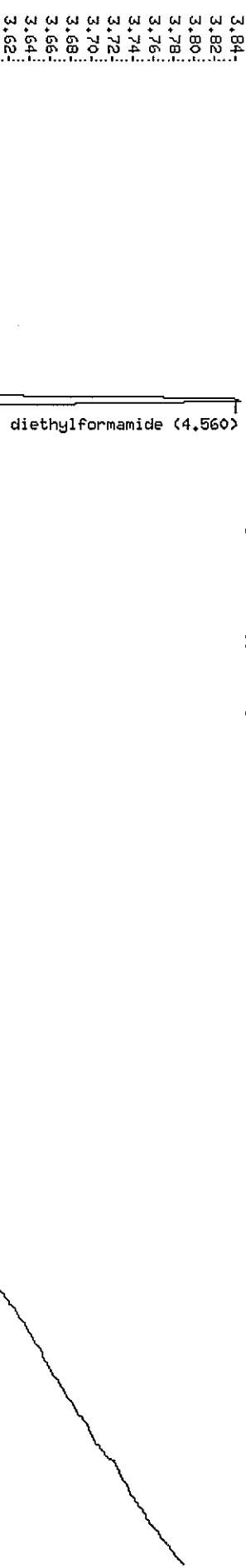
Column phase: Stabil wax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11DL21B1.b\\BDL2126.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/10/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 14:44  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-4  
Client ID: OC-EBK-016  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		106%				

Page 01 of 01 BDL2127.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2127.d  
Report Date: 07-Jan-2011 07:55

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2127.d  
Lab Smp Id: SD7693-4 Client Smp ID: OC-EBK-016  
Inj Date : 21-DEC-2010 14:44  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,SD7693-4  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS		REVIEW CODE
					ON-COLUMN ( mg/L)	FINAL ( mg/L)	
\$ 2 diethylformamide	4.546	4.533	0.013	287455	1.05730	1.06(M)	M4

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\Target\_server\\gg\\chem\\gc14.i\\GC11D21B1.b\\BDL2127.d

Date : 24-DEC-2010 14:44

Client ID: DC-ERK-016

Sample Info: DHFB0529.H,GC11D21B1.B,1,SD7693-4

Purge Volume: 0.0

Column Phase: Stabilwax

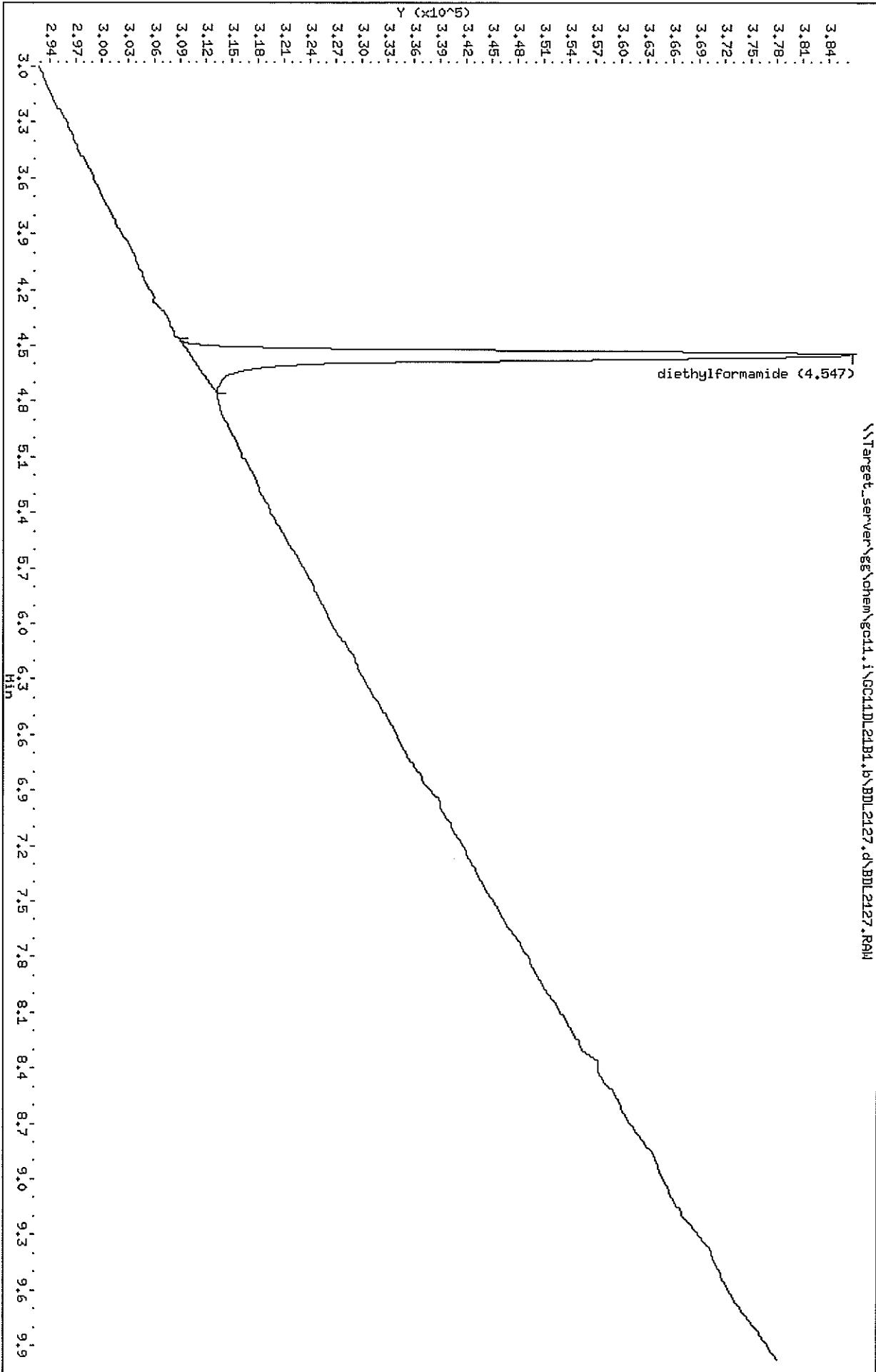
Instrument: gc14.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc14.i\\GC11D21B1.b\\BDL2127.d\\BDL2127.RAW

diethylformamide (4.547)



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation                                  Lab ID: SD7693-5  
Project: RI Analytical - Wilmington                    Client ID: OC-SW-ISCO-1-DUP  
PO No:    SDG: WIL-16  
Sample Date: 12/10/10                                 Extracted by:  
Received Date: 12/10/10                               Extraction Method: 8033M  
Extraction Date:                                         Analyst: JLP  
Analysis Date: 21-DEC-2010 14:59                      Analysis Method: SW846 8033M  
Report Date: 01/07/2011                                Lab Prep Batch: WG86508  
Matrix: WATER    Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		106%				

Page 01 of 01 BDL2128.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2128.d  
Report Date: 07-Jan-2011 07:55

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2128.d  
Lab Smp Id: SD7693-5 Client Smp ID: OC-SW-ISCO-1-DUP  
Inj Date : 21-DEC-2010 14:59  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,SD7693-5  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS		REVIEW CODE
					ON-COLUMN (mg/L)	FINAL (mg/L)	
\$ 2 diethylformamide	4.546	4.533	0.013	287707	1.05819	1.06 (M)	M4

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2128.d

Date : 21-DEC-2010 14:59

Client ID: DC-SM-1500-1-JLP

Sample Info: DHFBOSA.R,GC11D21B1.B,1,SD7693-5

Purge Volume: 0.0

Column Phase: Stabilwax

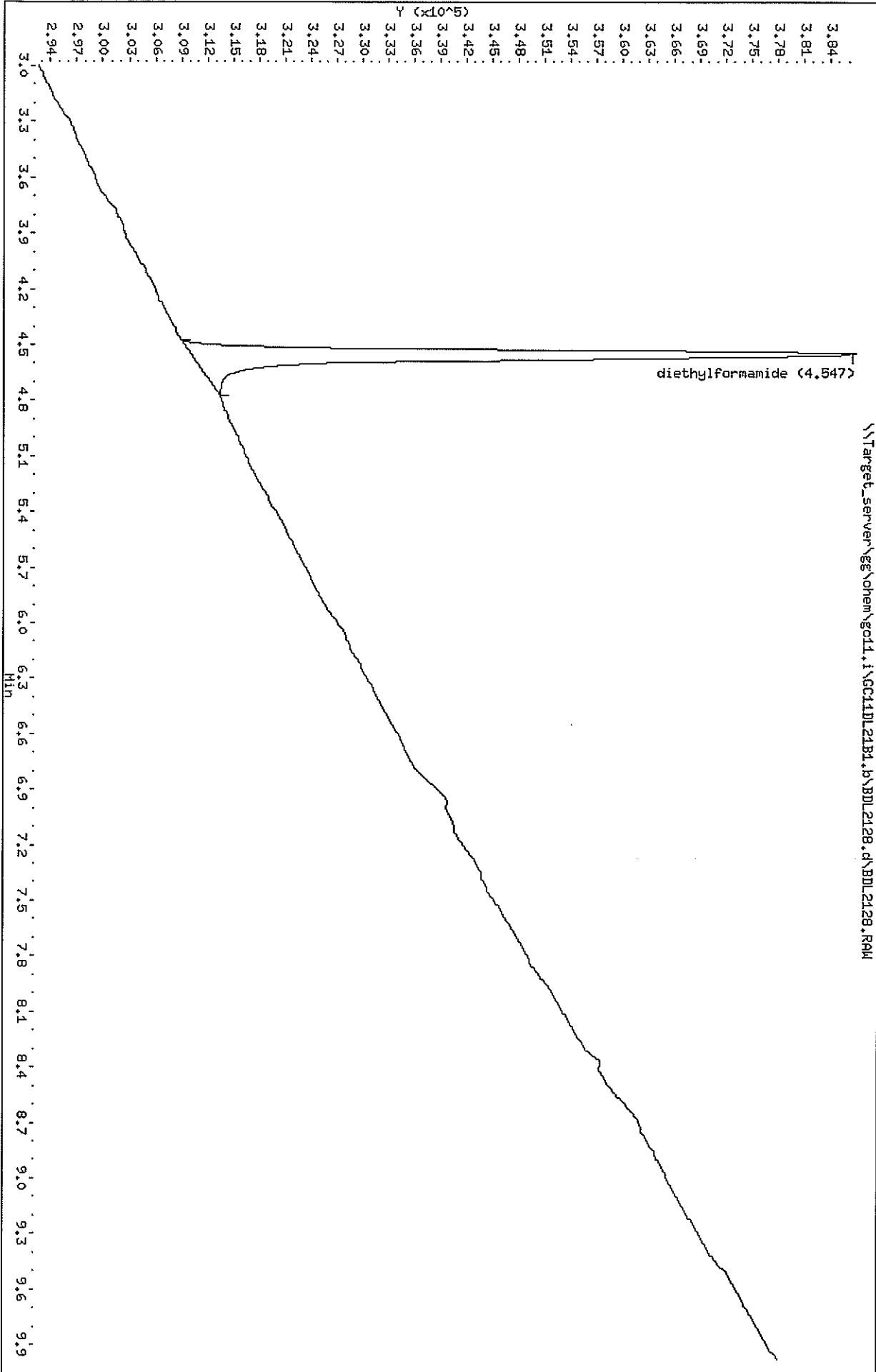
Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2128.d\\BDL2128.RAW

diethylformamide (4.547)



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/10/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 15:42  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-6  
Client ID: OC-SW-ISCO-1-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		108%				

Page 01 of 01 BDL2131.d

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2131.d  
Lab Smp Id: SD7693-6 Client Smp ID: OC-SW-ISCO-1-XXX  
Inj Date : 21-DEC-2010 15:42  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,SD7693-6  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					( mg/L)	( mg/L)	
\$ 2 diethylformamide	4.546	4.533	0.013	292860	1.07653	1.08(M)	M4

QC Flag Legend

M - Compound response manually integrated.

JV  
010711

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2131.d  
Date : 21-DEC-2010 15:42  
Client ID: DC-SW-1500-1-XXXX

Sample Info: DHFB050A.H,GC11D21B1.B,1,SD7693-6

Purge Volume: 0.0

Column Phase: Stabilwax

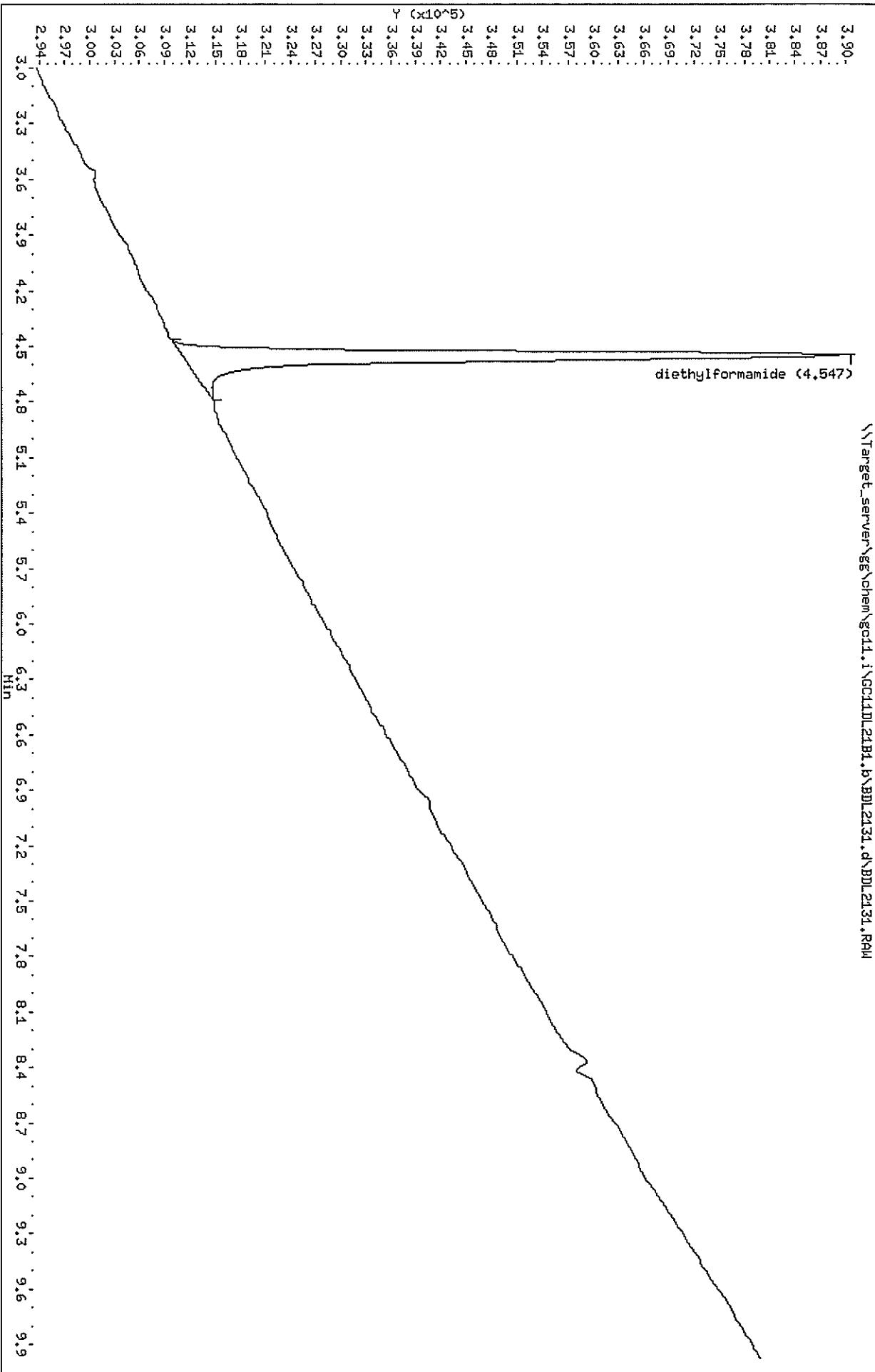
Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11D21B1.b\\BDL2131.d\\BDL2131.RAW

diethylformamide (4.547)



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/09/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 21-DEC-2010 15:13  
Report Date: 01/07/2011  
Matrix: WATER  
% Solids: NA

Lab ID: SD7693-7  
Client ID: OC-SW-ISCO-2-XXX  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		108%				

Page 01 of 01 BDL2129.d

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2129.d  
Lab Smp Id: SD7693-7 Client Smp ID: OC-SW-ISCO-2-XXX  
Inj Date : 21-DEC-2010 15:13  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,SD7693-7  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfb051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	FINAL	
\$ 2 diethylformamide	4.546	4.533	0.013	295004	1.08416	1.08(M)	M4

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2129.d  
Date : 21-DEC-2010 15:13  
Client ID: DC-SM-1500-2-KKK  
Sample Info: DHFB051A.M,GC11DL21B1.B,1,SD17693-7  
Purge Volume: 0.0

Column phase: Stabilwax

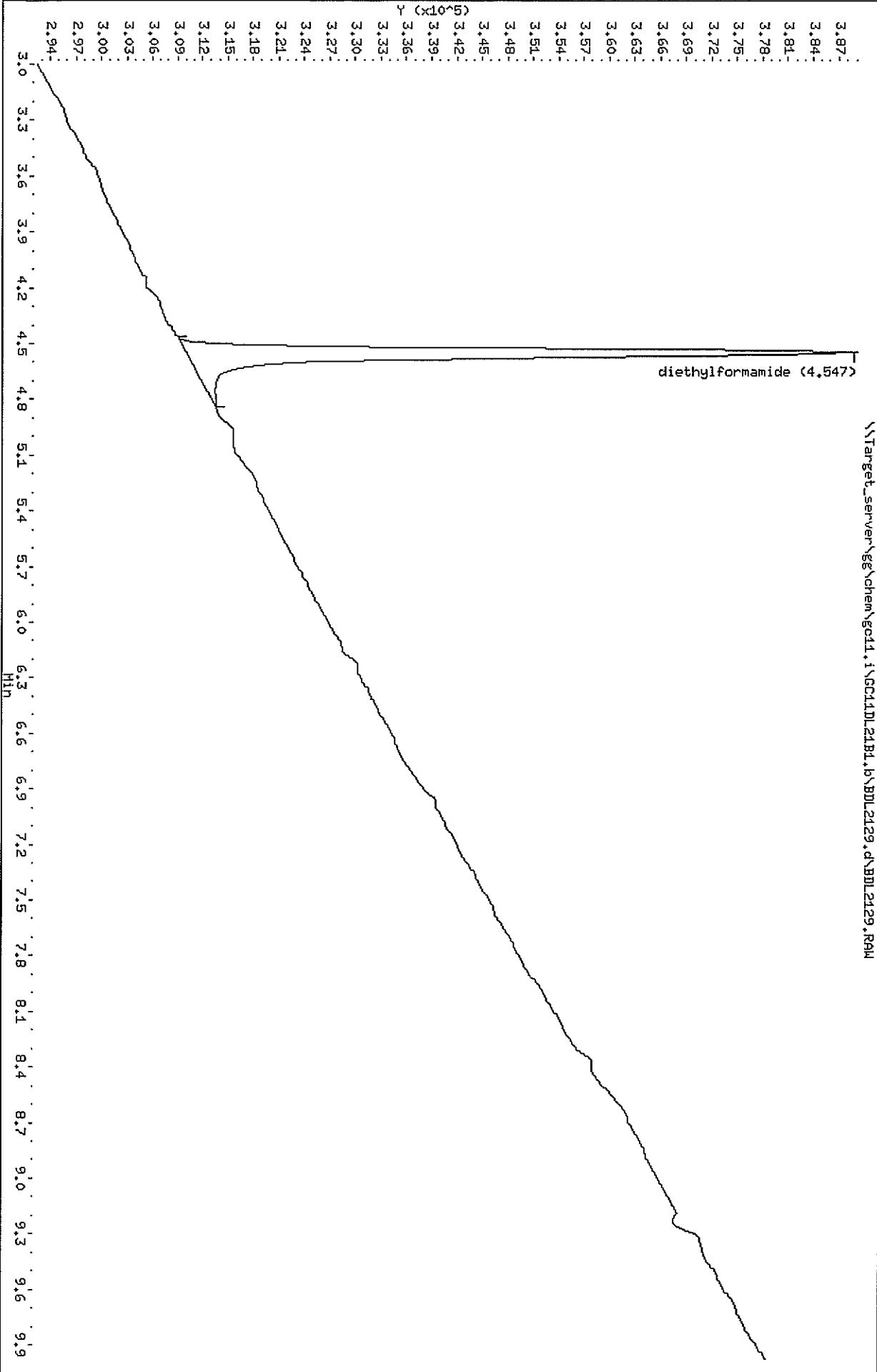
Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2129.d\BDL2129.RAW

diethylformamide (4.547)



## **Standards Data Section**

FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date(s): 11/17/10 11/17/10

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 1515 1641

LAB FILE ID: RF0.02: BDK2114 RF0.05: BDK2115 RF0.1: BDK2116  
RF0.25: BDK2117 RF0.5: BDK2118 RF1: BDK2120

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		%RSD	MAX %RSD
								A0	A1		
dimethylformamide	8938	27041	53683	149920	289500	576810	LINR	1.553e-003	1.726e-006	0.99979	0.99000
diethylformamide	81674	194730	379020	1096700	1682900		LINR	4.383e-002	2.325e-006	0.99849	0.99000

FORM VI DMF

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2114.d  
Lab Smp Id: ICAL 0.02  
Inj Date : 17-NOV-2010 15:15  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M, GC11DK17B1.B,1, ICAL 0.02  
Misc Info :  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\DMFB049A.m  
Meth Date : 18-Nov-2010 07:13 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 15:15 Cal File: BDK2114.RAW  
Als bottle: 1 Calibration Sample, Level: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE	
	RT	EXP RT	DLT RT	RT	RESPONSE	CAL-AMT ( mg/L)	ON-COL ( mg/L)	
	====	=====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.546	3.587	-0.041		8938	0.02000	0.0173(a)	
\$ 2 diethylformamide	4.560	4.587	-0.027		81674	0.25000	1.42	

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ) .

Data File: \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2114.d  
Date : 17-NOV-2010 15:15

Client ID:

Sample Info: DHFB049A.M,GC11DK17B1.B,1,ICAL 0.02

Purge Volume: 0.0

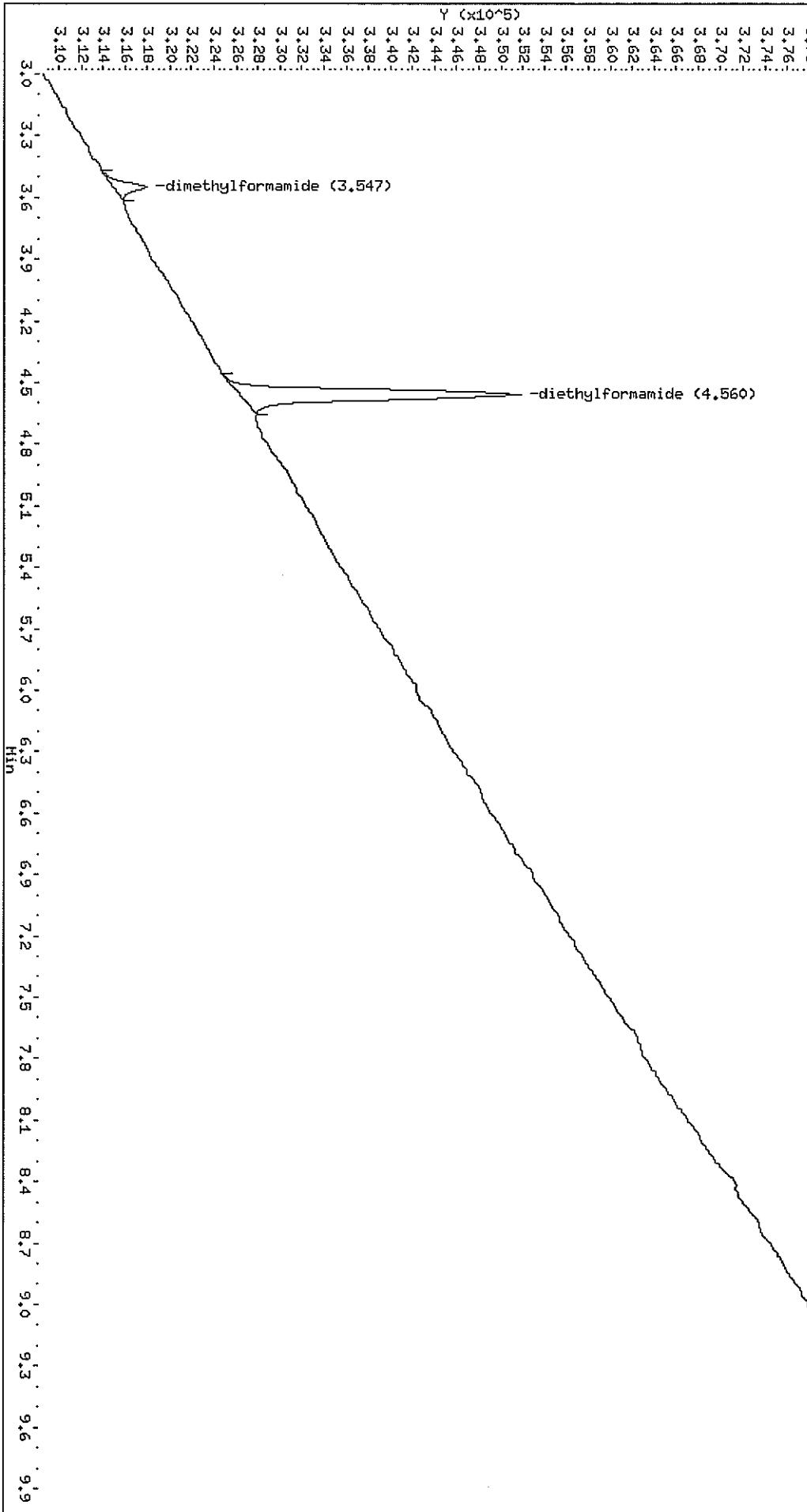
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2114.d\BDK2114.RAW



Data File: \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2115.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2115.d  
Lab Smp Id: ICAL 0.05  
Inj Date : 17-NOV-2010 15:30  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DK17B1.B,1,ICAL 0.05  
Misc Info :  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\DMFB049A.m  
Meth Date : 18-Nov-2010 07:13 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 15:30 Cal File: BDK2115.RAW  
Als bottle: 1 Calibration Sample, Level: 2  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE	
	RT	EXP RT	DLT RT	RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)	( mg/L)					
1 dimethylformamide	3.586	3.587	-0.001		27041	0.05000	0.0480	
\$ 2 diethylformamide	4.573	4.587	-0.014		194729	0.50000	1.33	

Client ID:

Sample Info: DHFB049a.M,GC11DK17B1.B,1.ICAL 0.05  
Purge Volume: 0.0

Column phase: Stabilux

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\geg\chem\gc11.i\GC11DK17B1.b\BDK2115.d\BDK2115.RAW



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3.68  
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0.10  
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0.06  
0.04  
0.02  
0.00

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2116.d  
Lab Smp Id: ICAL 0.1  
Inj Date : 17-NOV-2010 15:44  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DK17B1.B,1,ICAL 0.1  
Misc Info :  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\DMFB049A.m  
Meth Date : 18-Nov-2010 07:13 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 15:44 Cal File: BDK2116.RAW  
Als bottle: 1 Calibration Sample, Level: 3  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.586	3.587	-0.001	53683	0.10000	0.0935	
\$ 2 diethylformamide	4.573	4.587	-0.014	379022	1.00000	1.46	

Data File: \\Target\_server\\gg\\chen\\go14.i\\GC11DK17B1.b\\BDK2116.d  
Date : 17-NOV-2010 15:44

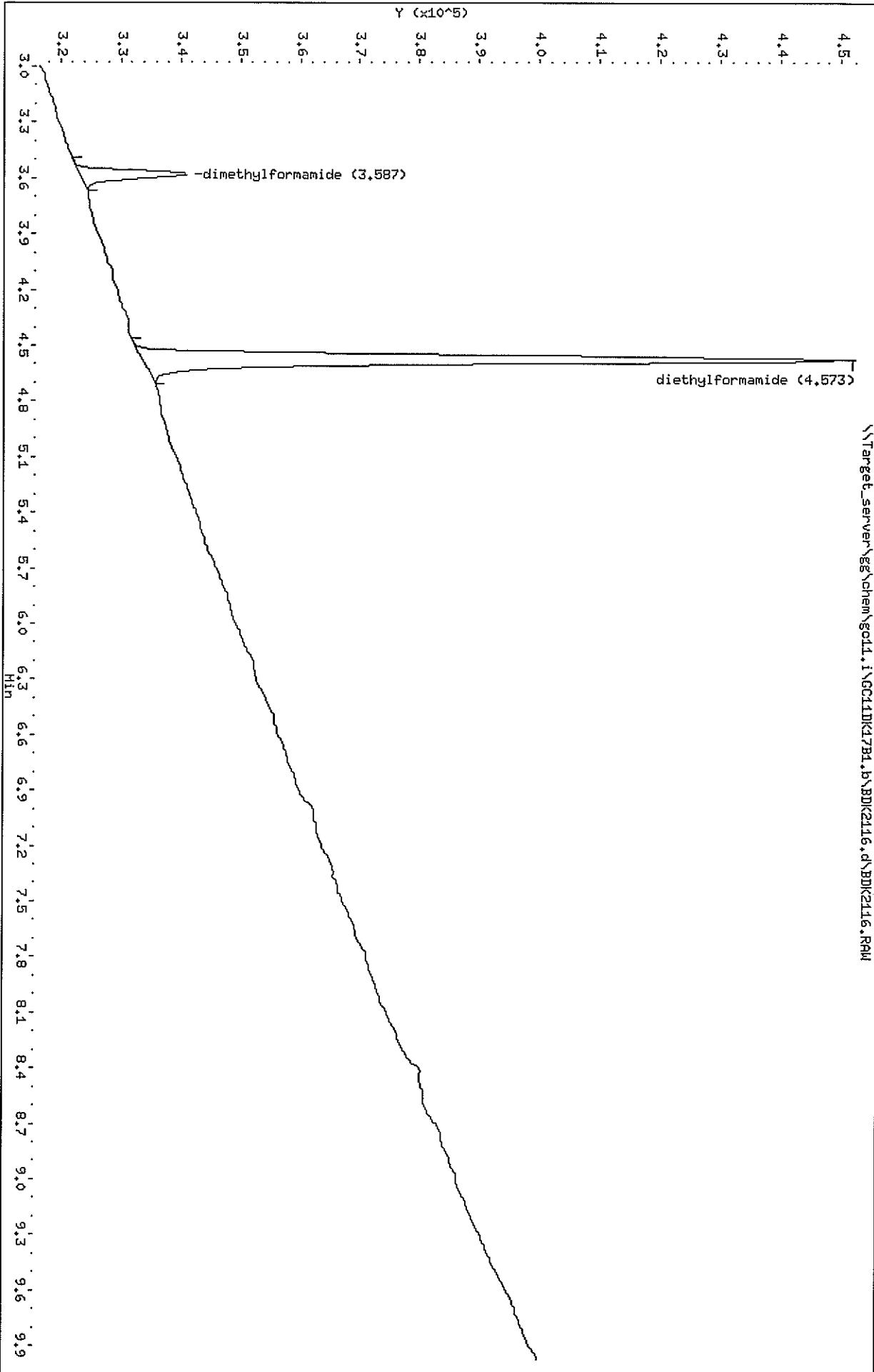
Client ID:

Sample Info: DMFB049A.H,GC11DK17B1.B,1.ICL 0.1  
Purge Volume: 0.0  
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP  
Column diameter: 0.53

\\Target\_server\\gg\\chen\\go14.i\\GC11DK17B1.b\\BDK2116.RAW



Data File: \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2117.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2117.d  
Lab Smp Id: ICAL 0.25  
Inj Date : 17-NOV-2010 15:58  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DK17B1.B,1,ICAL 0.25  
Misc Info :  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\DMFB049A.m  
Meth Date : 18-Nov-2010 07:13 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 15:58 Cal File: BDK2117.RAW  
Als bottle: 1 Calibration Sample, Level: 4  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS		REVIEW CODE
					CAL-AMT ( mg/L)	ON-COL ( mg/L)	
1 dimethylformamide	3.586	3.587	-0.001	149923	0.25000	0.250	
§ 2 diethylformamide	4.586	4.587	-0.001	1096662	2.50000	2.63	

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11DK17B1.b\\BDK2117.d  
Date : 17-Nov-2010 15:58

Client ID:

Sample Info: DMRB049A.H,GC11DK17B1.B,1,ICAL 0.25  
Purge Volume: 0.0

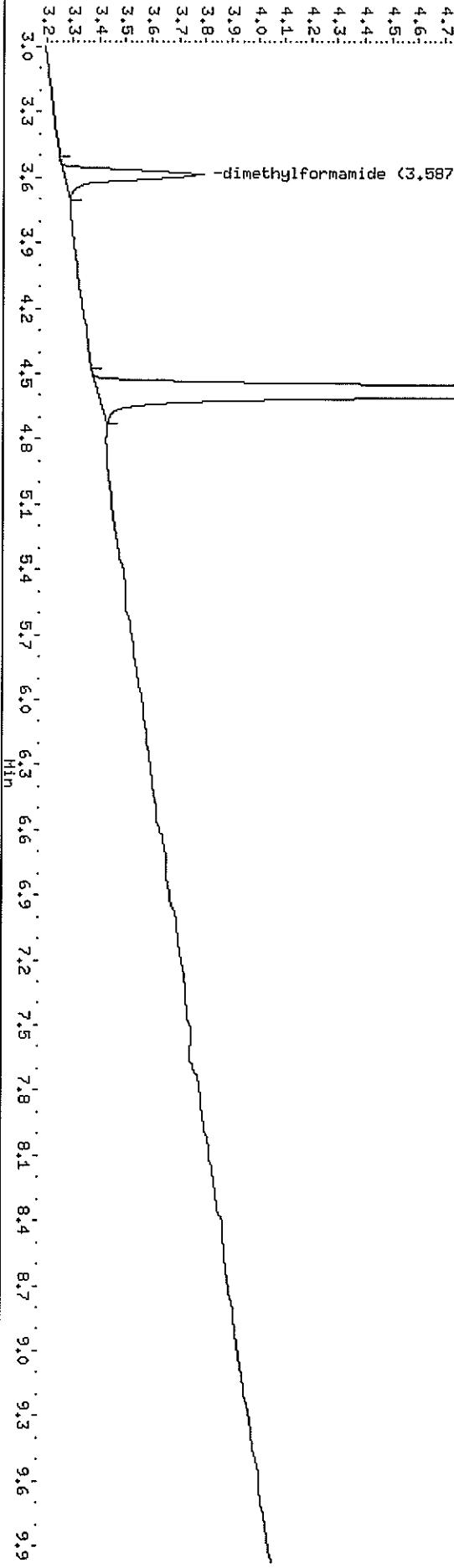
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11DK17B1.b\\BDK2117.d\\BDK2117.RAW



Data File: \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2118.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2118.d  
Lab Smp Id: ICAL 0.5  
Inj Date : 17-NOV-2010 16:12  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DK17B1.B,1,ICAL 0.5  
Misc Info :  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\DMFB049A.m  
Meth Date : 18-Nov-2010 07:13 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:12 Cal File: BDK2118.RAW  
Als bottle: 1 Calibration Sample, Level: 5  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE	
	RT	EXP RT	DLT RT	RT	RESPONSE	CAL-AMT ( mg/L)	ON-COL ( mg/L)	
	====	=====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.586	3.587	-0.001		289501	0.50000	0.497	
\$ 2 diethylformamide	4.586	4.587	-0.001		1682922	4.00000	3.96	

Client ID:

Sample Info: DHFB049A.H,GC11DK17B1.B,1,ICAL 0.5  
Purge Volume: 0.0

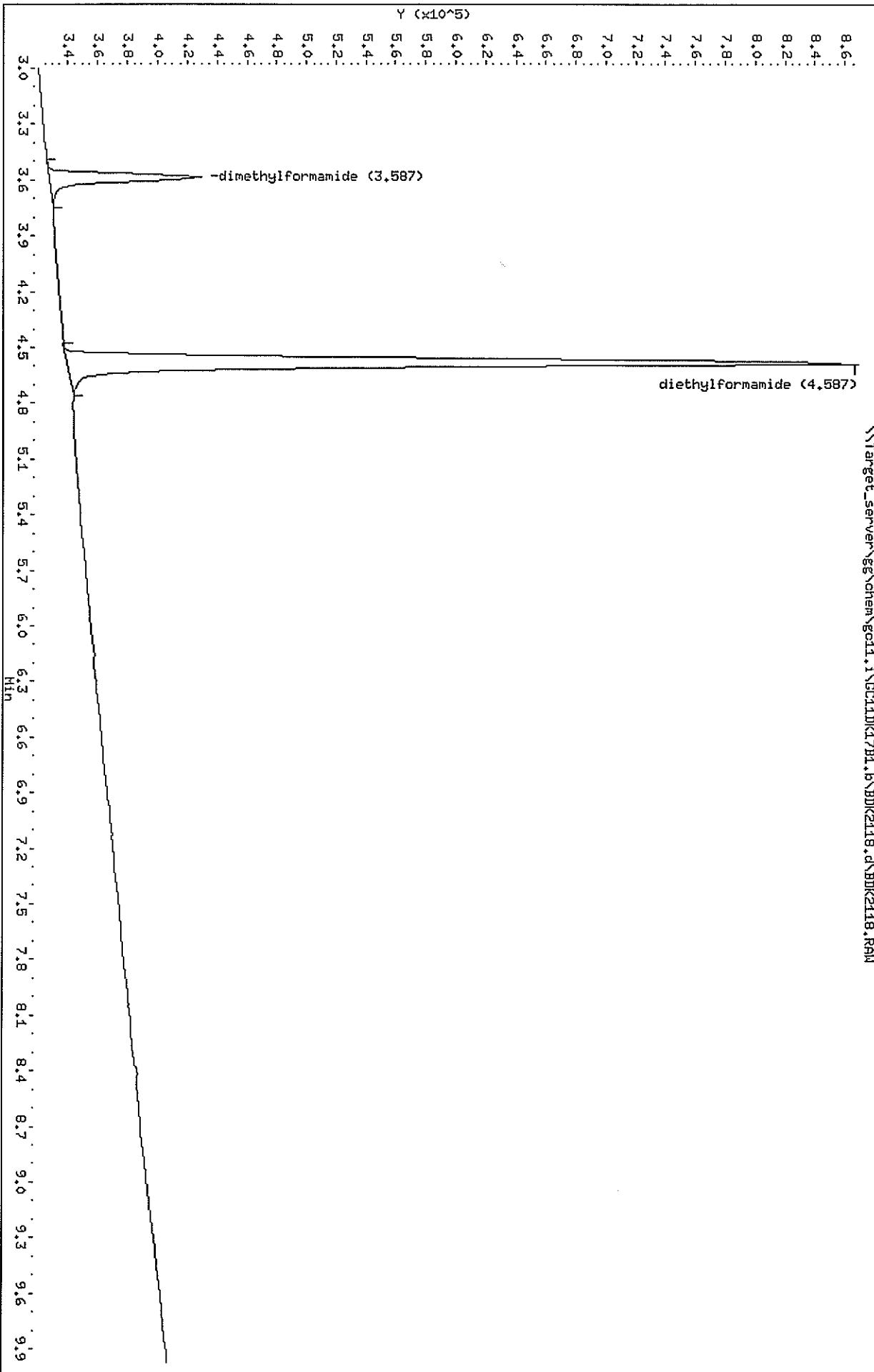
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\go11.i\\GC11DK17B1.b\\BDK2118.d\\BDK2118.RAW



Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\BDK2120.d  
Lab Smp Id: ICAL 1.0  
Inj Date : 17-NOV-2010 16:41  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DK17B1.B,1,ICAL 1.0  
Misc Info :  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DK17B1.b\DMFB049A.m  
Meth Date : 18-Nov-2010 07:13 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1 Calibration Sample, Level: 6  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( mg/L)	ON-COL ( mg/L)	
	====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.586	3.587	-0.001	576806	1.00000	0.997	=====

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11DK17B1.b\\BDK2120.d  
Date : 17-NOV-2010 16:41

Client ID:

Sample Info: DHFBo49A.H,GC11DK17B1.B,1,ICAL 1.0  
Purge Volume: 0.0

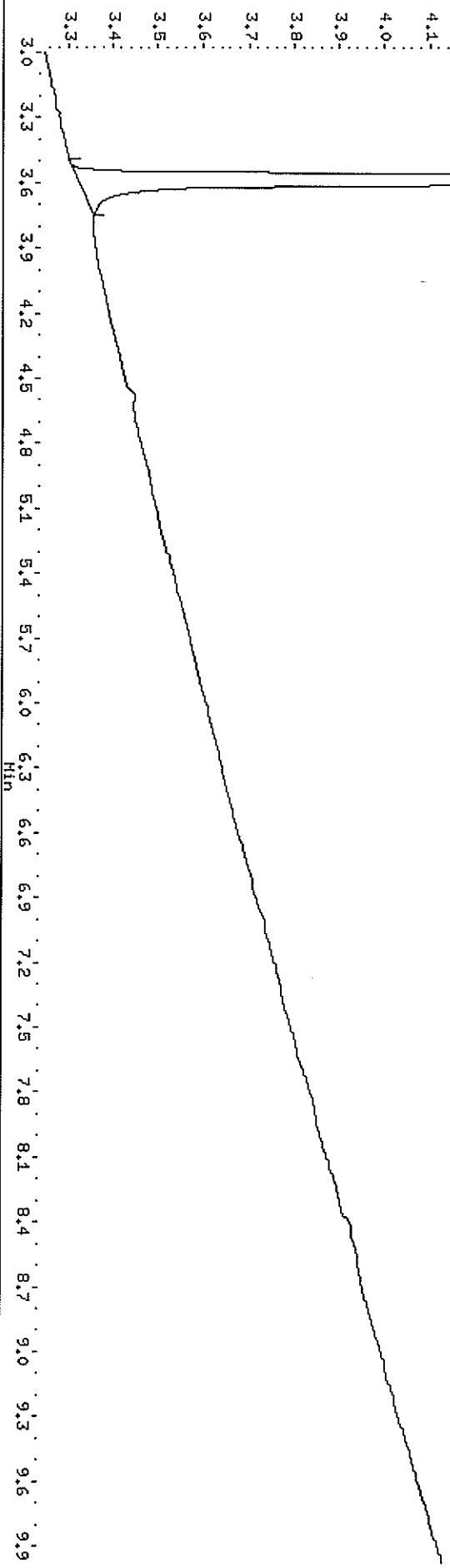
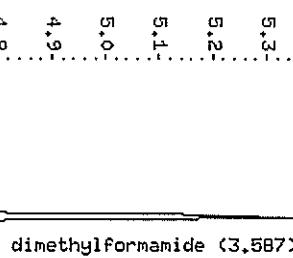
Column phases: Stabilux

Instrument: gC11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11DK17B1.b\\BDK2120.d\\BDK2120.RAW



FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date(s): 12/21/10 12/21/10

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 1049 1230

LAB FILE ID: RF0.02: BDL2112 RF0.05: BDL2113 RF0.1: BDL2114  
RF0.25: BDL2115 RF0.5: BDL2116 RF1: BDL2118

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		%RSD	MAX %RSD
								A0	A1		
dimethylformamide	7122	17178	42246	103000	192620	417020	LINR	4.941e-003	2.415e-006	0.99866	0.99000
diethylformamide	63284	117320	252640	713810	1106400		LINR	3.453e-002	3.558e-006	0.99890	0.99000

FORM VI DMF

FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date(s): 12/21/10 12/21/10

Column: STABILWAX ID: 0.53 (mm) Calibration Time(s): 1049 1230

RF0.005: BDL2111

COMPOUND	RF0.005	CURVE	COEFFICIENTS		%RSD	MAX %RSD
			A0	A1		
dimethylformamide_____	1402	LINR	4.941e-003	2.415e-006	0.99866	0.99000
diethylformamide_____	25393	LINR	3.453e-002	3.558e-006	0.99890	0.99000

FORM VI DMF

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2111.d  
Lab Smp Id: ICAL 0.005  
Inj Date : 21-DEC-2010 10:49  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,ICAL 0.005  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 10:49 Cal File: BDL2111.d  
Als bottle: 1 Calibration Sample, Level: 7  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.546	3.533	0.013	1402	0.00500	0.0134(aM)	M4
§ 2 diethylformamide	4.546	4.533	0.013	25393	0.10000	0.101(M)	JLP 010711

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).  
M - Compound response manually integrated.

Client ID:

Sample Info: DHFBOSIA,H,GC11DL21B1.B,1,ICAL 0:005

Purge Volume: 0.0

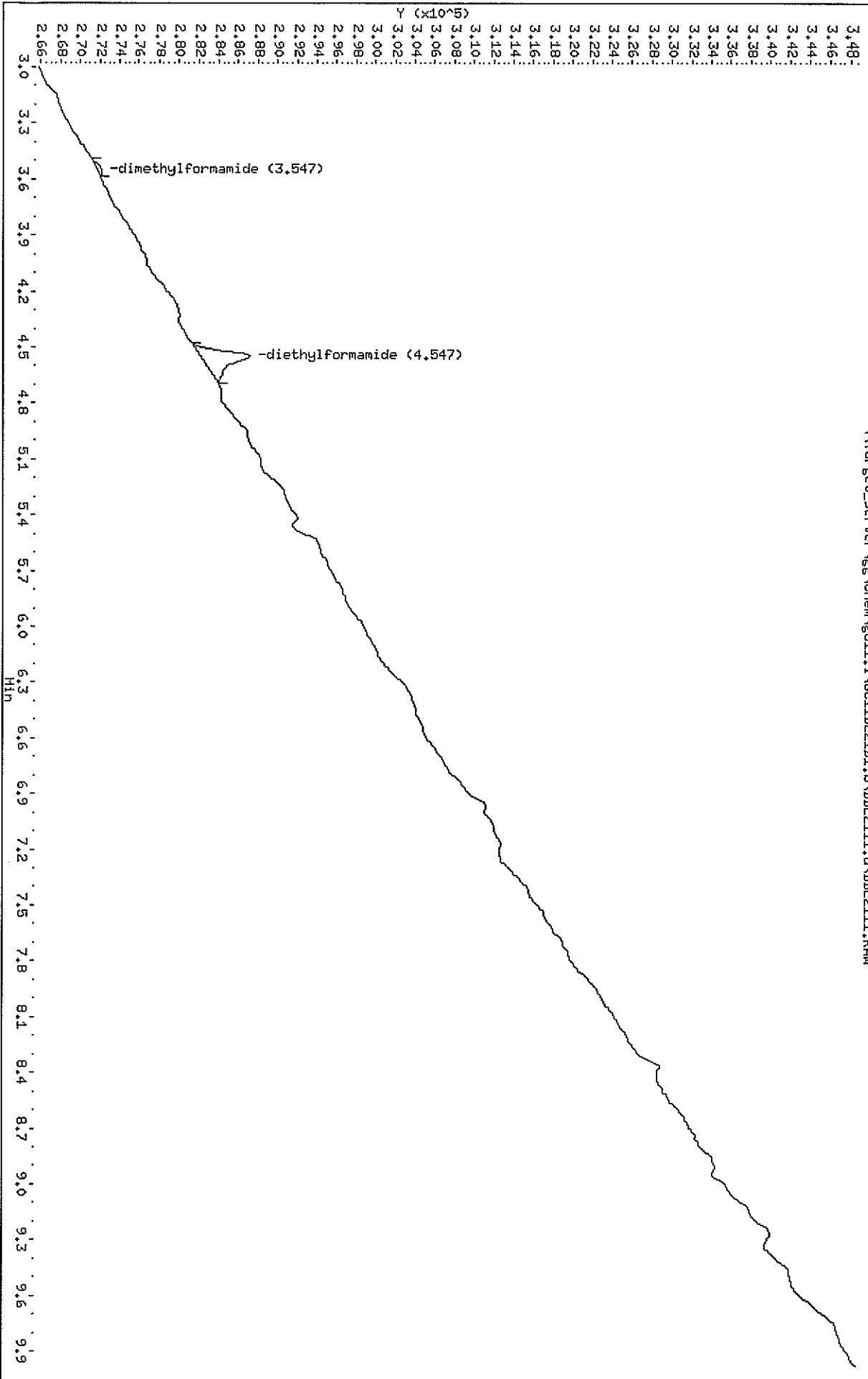
Column phase: Stabilmax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2111.RAW



Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2112.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2112.d  
Lab Smp Id: ICAL 0.02  
Inj Date : 21-DEC-2010 11:04  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,ICAL 0.02  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 11:04 Cal File: BDL2112.d  
Als bottle: 1 Calibration Sample, Level: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)					
1 dimethylformamide	3.546	3.533	0.013	7122	0.02000	0.0215(M)	M4
2 diethylformamide	4.546	4.533	0.013	63284	0.25000	0.263	JLP 010711

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\gg\\chem\\gc14.i\\GC11DL21B1.b\\BDL2112.d  
Date : 21-DEC-2010 11:04

Client ID:  
Sample Info: DHFB051A.H,GC11DL21B1.B,1,ICAL 0.02

Purge Volume: 0.0

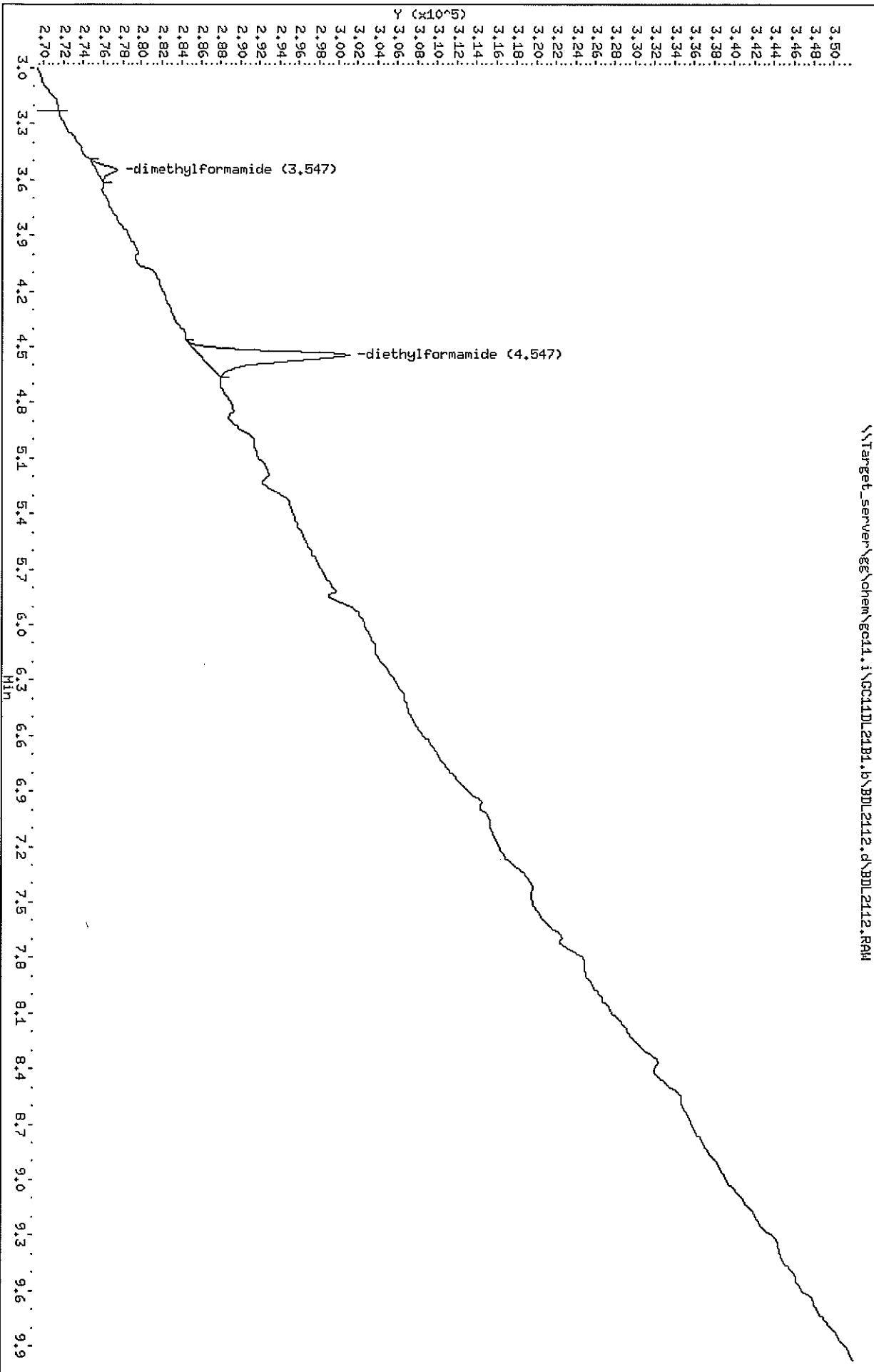
Column phase: Stabilwax

Instrument: gc14.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc14.i\\GC11DL21B1.b\\BDL2112.d\\BDL2112.RAW



Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2113.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2113.d  
Lab Smp Id: ICAL 0.05  
Inj Date : 21-DEC-2010 11:18  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,ICAL 0.05  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 11:18 Cal File: BDL2113.d  
Als bottle: 1 Calibration Sample, Level: 2  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( mg/L)	ON-COL ( mg/L)	
	====	=====	=====	=====	=====	=====	=====
1 dimethylformamide	3.533	3.533	0.000	17178	0.05000	0.0497(M)	M4
\$ 2 diethylformamide	4.533	4.533	0.000	117317	0.50000	0.493	

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Client ID:

Sample Info: DIFB051A.H,GC11DL21B1.B,1.ICAL 0.05

Purge Volume: 0.0

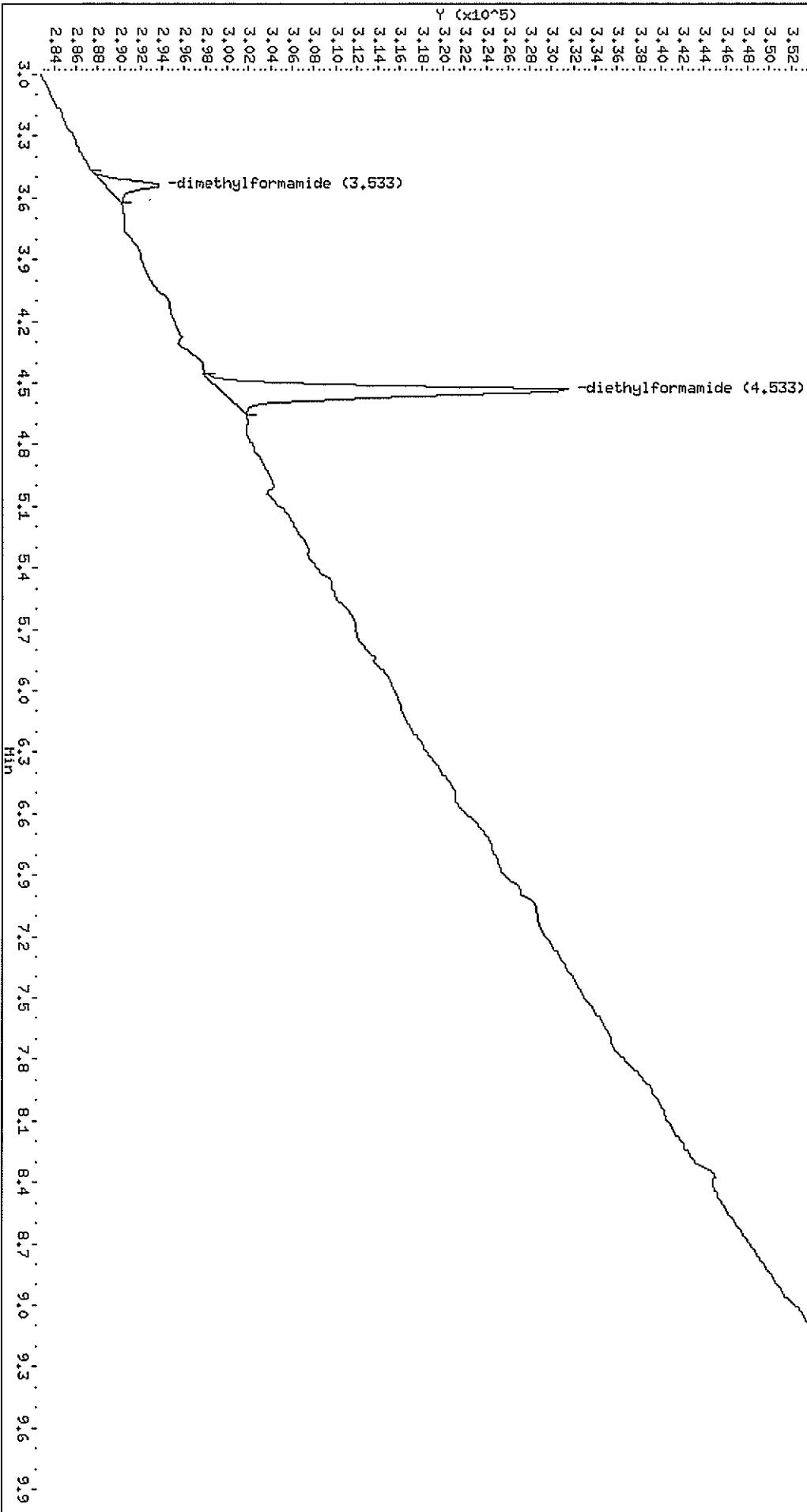
Column phase: Stabilux

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2113.d\BDL2113.RAW



Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2114.d  
Lab Smp Id: ICAL 0.1  
Inj Date : 21-DEC-2010 11:33  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M, GC11DL21B1.B,1, ICAL 0.1  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 11:33 Cal File: BDL2114.d  
Als bottle: 1 Calibration Sample, Level: 3  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	====	=====	=====	=====	=====	=====	=====
1 dimethylformamide	3.546	3.533	0.013	42246	0.10000	0.0997(M)	M4
\$ 2 diethylformamide	4.546	4.533	0.013	252641	1.00000	0.933	JP 010711

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\geg\\chem\\gc11.i\\GC11DL21B4.b\\BDL2114.d  
Date : 21-DEC-2010 11:33

Client ID:

Sample Info: DHFB051A.H,GC11DL21B4.B,1,ICAL 0.1

Purge Volume: 0.0

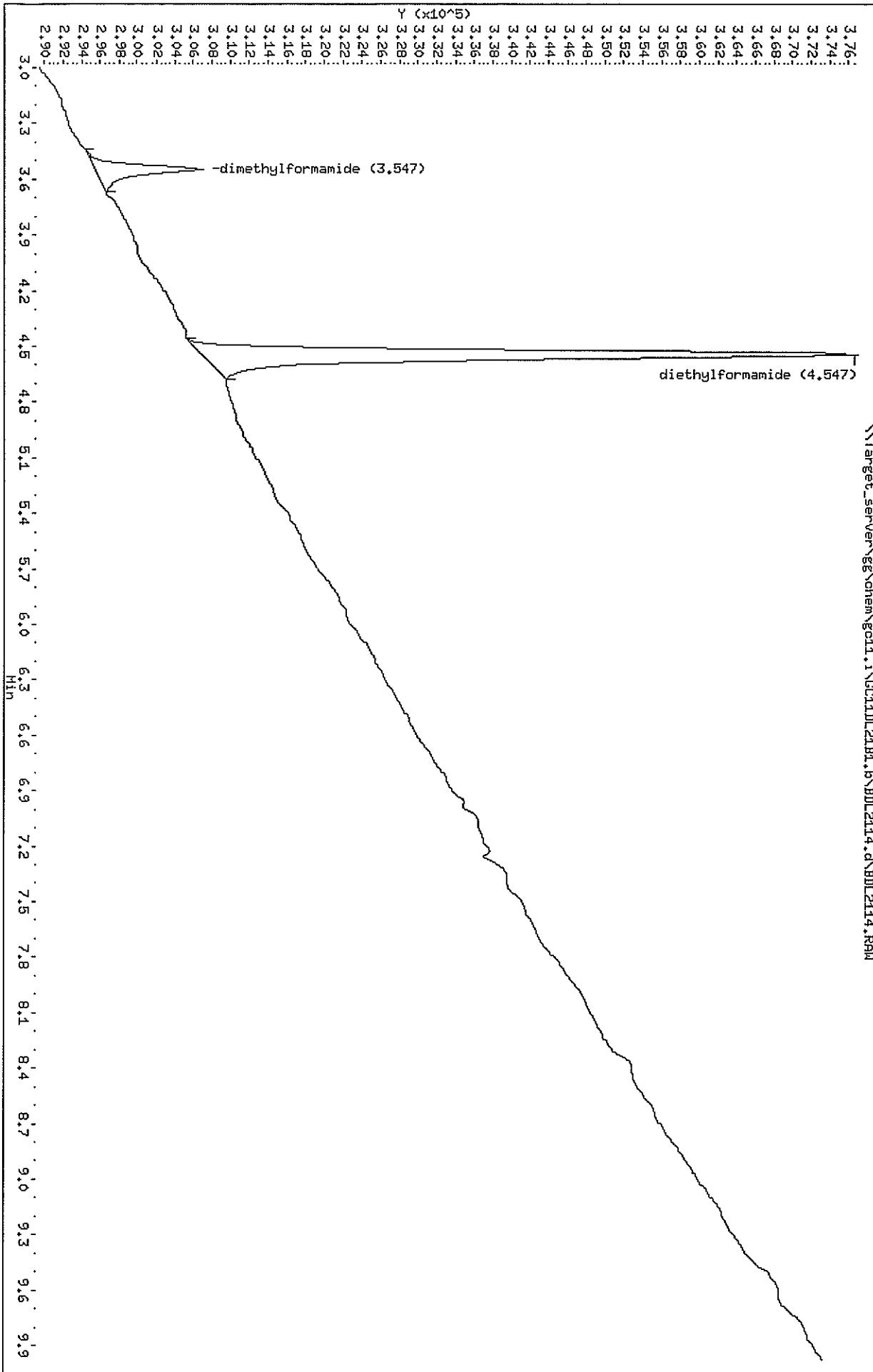
Column phase: Stabilwax

Instrument: 8011.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\geg\\chem\\gc11.i\\GC11DL21B4.b\\BDL2114.d\\BDL2114.RAW



Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2115.d  
Lab Smp Id: ICAL 0.25  
Inj Date : 21-DEC-2010 11:47  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,ICAL 0.25  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.b\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 11:47 Cal File: BDL2115.RAW  
Als bottle: 1 Calibration Sample, Level: 4  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( mg/L)	ON-COL ( mg/L)	
1 dimethylformamide	3.533	3.533	0.000	103004	0.25000	0.263(M)	M4
§ 2 diethylformamide	4.533	4.533	0.000	713810	2.50000	2.57	JLP 010711

QC Flag Legend

M - Compound response manually integrated.

Data File: \\target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2115.d

Date : 21-DEC-2010 11:47

Client ID:

Sample Info.: DHFB051A.H,GC11DL21B1.B,1,ICAL 0.25

Purge Volume: 0.0

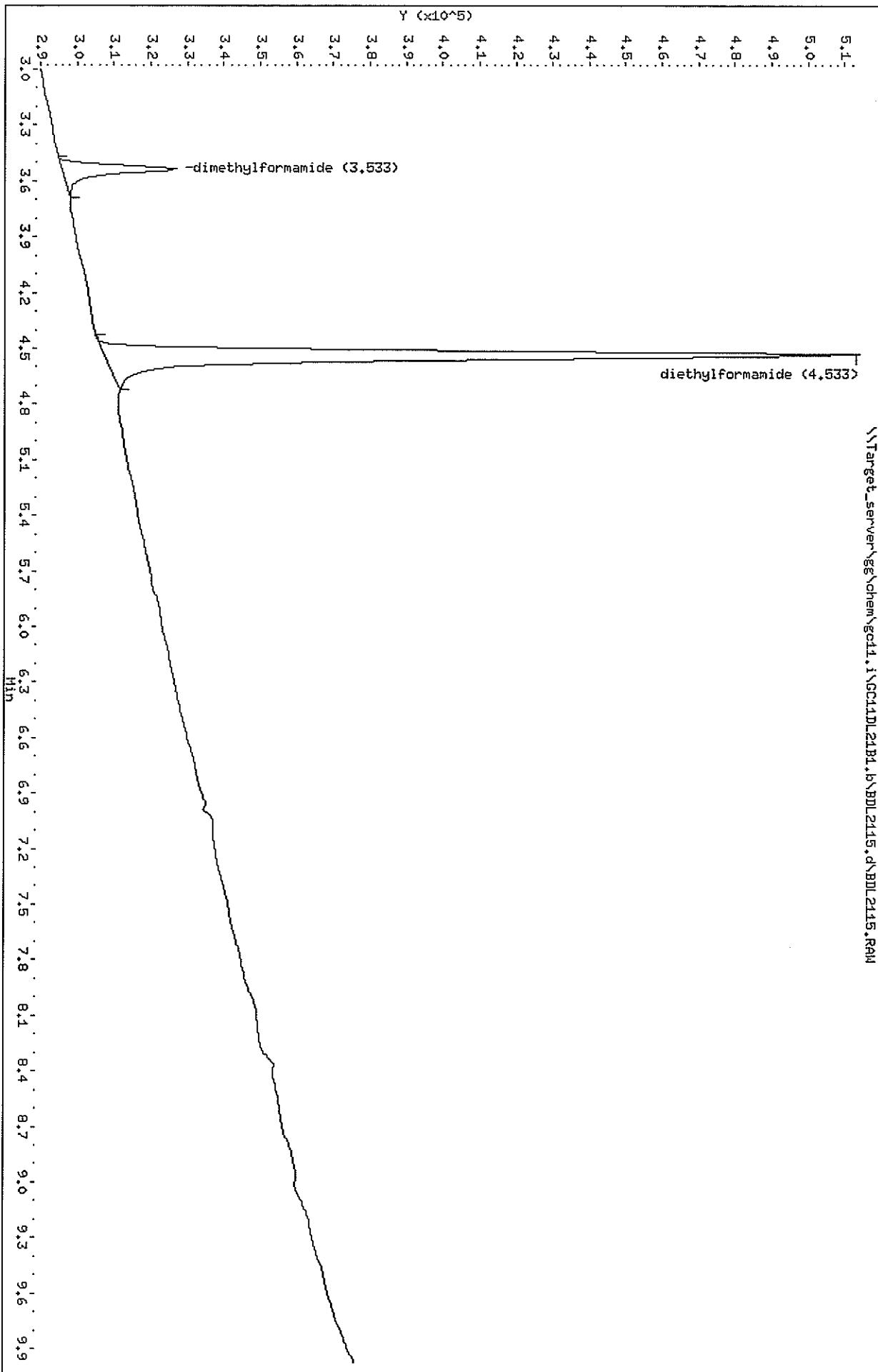
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_Server\gg\chem\gc11.i\GC11DL21B1.b\BDL2115.d\BDL2115.Raw



Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2116.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2116.d  
Lab Smp Id: ICAL 0.5  
Inj Date : 21-DEC-2010 12:02  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,ICAL 0.5  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:02 Cal File: BDL2116.d  
Als bottle: 1 Calibration Sample, Level: 5  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.533	3.533	0.000	192615	0.50000	0.119	
\$ 2 diethylformamide	4.533	4.533	0.000	1106440	4.00000	3.97	

Client IP:

Sample Info: DIFB051A.H,GC11DL21B1.B,1.ICAL 0.5

Purge Volume: 0.0

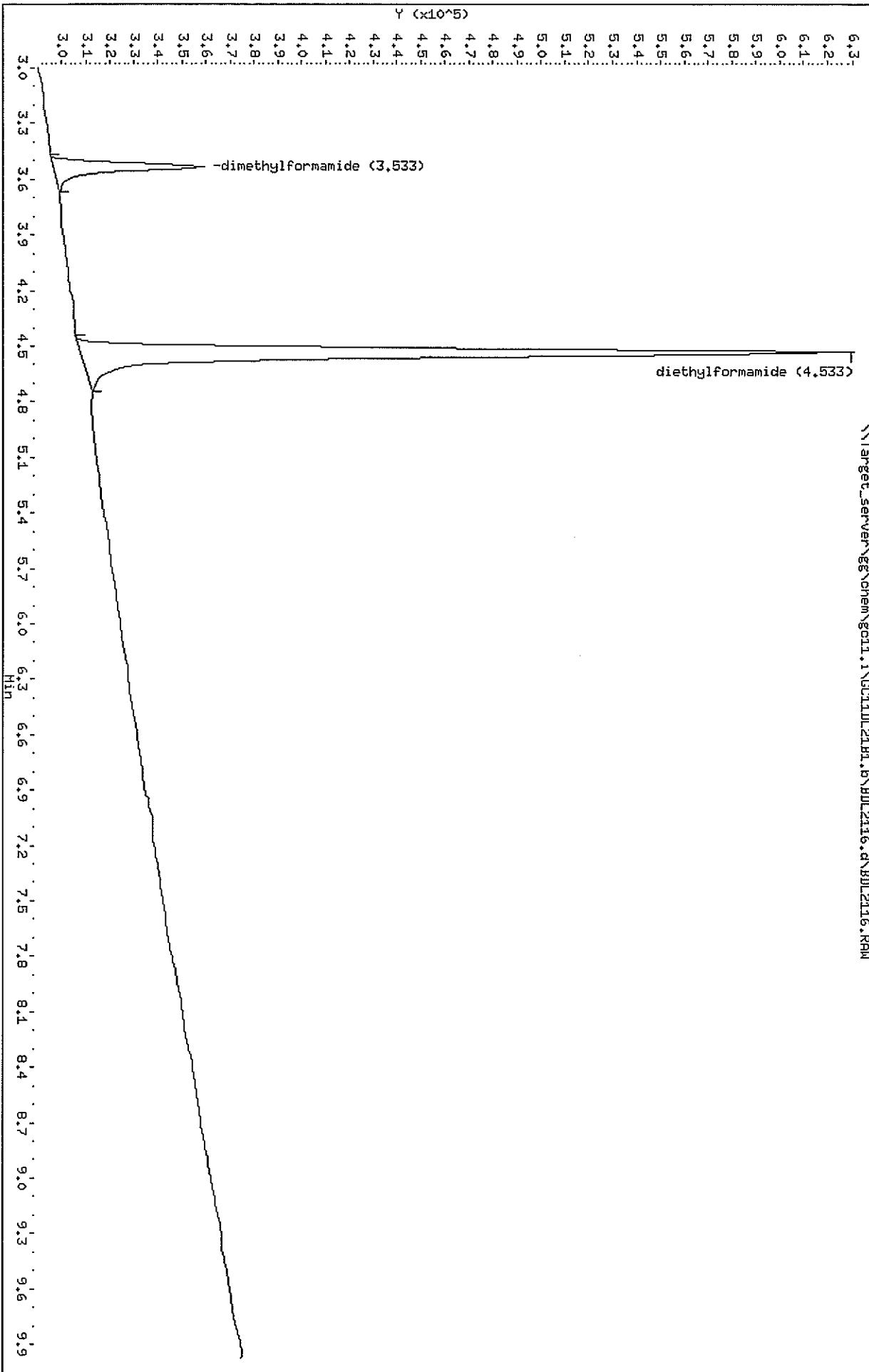
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\chem\\gc11.i\\GC11DL21B1.b\\BDL2116.d\\BDL2116.RAW



Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2118.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2118.d  
Lab Smp Id: ICAL 1.0  
Inj Date : 21-DEC-2010 12:30  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,ICAL 1.0  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 Calibration Sample, Level: 6  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.546	3.533	0.013	417019	1.00000	1.01(A)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Target\_server\\ge\\chem\\gc11.i\\GC11DL21B1.b\\BDL2118.d

Date : 21-DEC-2010 12:10

Client ID:

Sample Info: DIFBOSIA.H,GC11DL21B1.B,1,ICAL 1.0

Purge Volume: 0.0

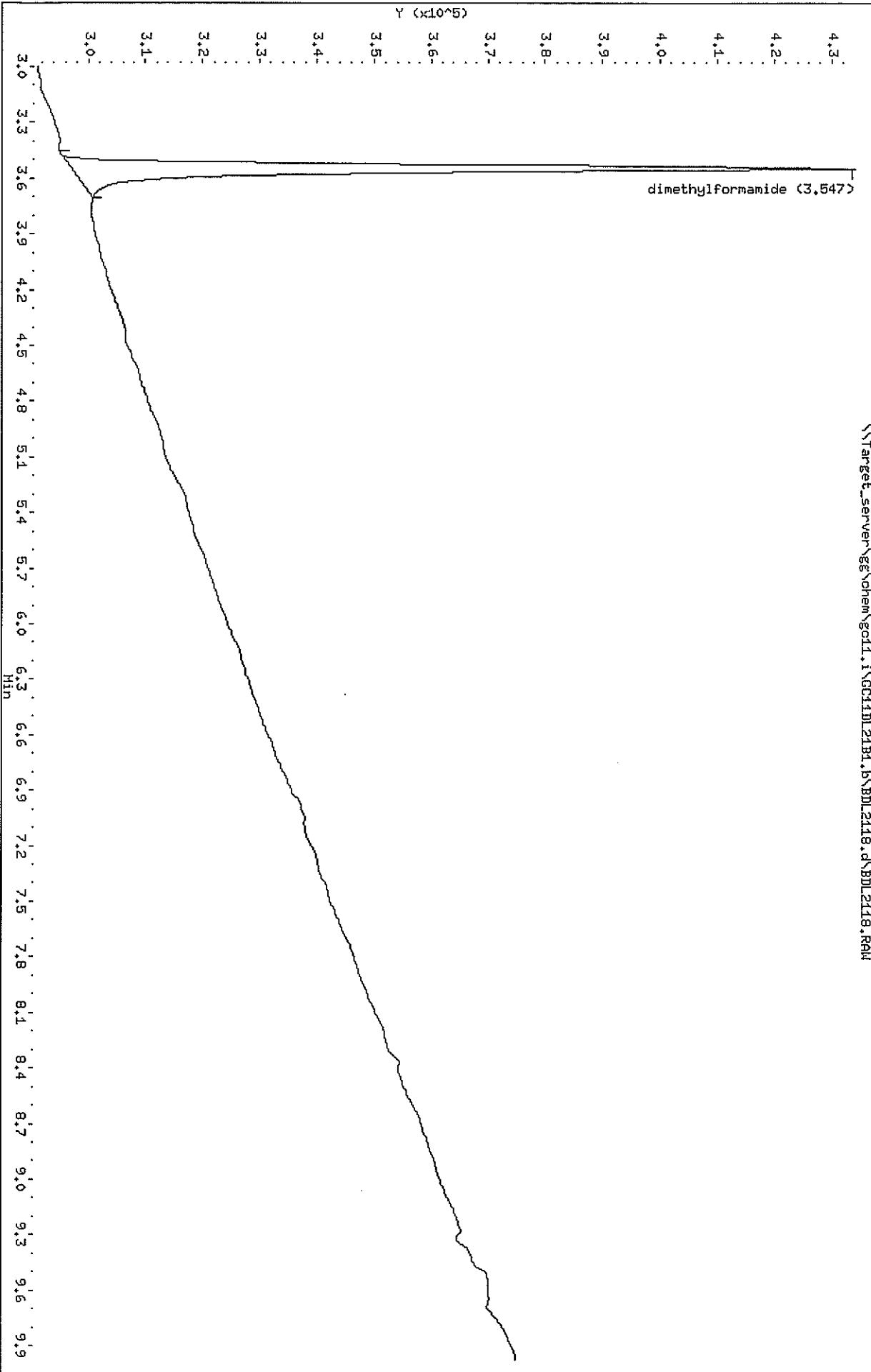
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\ge\\chem\\gc11.i\\GC11DL21B1.b\\BDL2118.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/01/10 Time: 0801

Lab File ID: BDL2002 Init. Calib. Date(s): 11/17/10 11/17/10

Init. Calib. Times: 1515 1641

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide_____	0.2577500	0.2500000	593620.00	0.01	3.10	25.00	LINR
diethylformamide_____	2.5756000	2.5000000	435540.00	0.01	3.02	25.00	LINR

FORM VII PEST

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2002.d  
Lab Smp Id: CV 0.25  
Inj Date : 01-DEC-2010 08:01  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.b\dmfB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS		REVIEW CODE
					CAL-AMT ( mg/L)	ON-COL ( mg/L)	
1 dimethylformamide	3.600	3.600	0.000	148406	0.25000	0.258	
\$ 2 diethylformamide	4.600	4.600	0.000	1088840	2.50000	2.58	

Data File: \\Target\_Server\\gg\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2002.d  
Date : 01-DEC-2010 08:01

Client ID:

Sample Info: DHFB049A.M,GC11D\\01B1.B,1.CV 0.25  
Purge Volume: 0.0

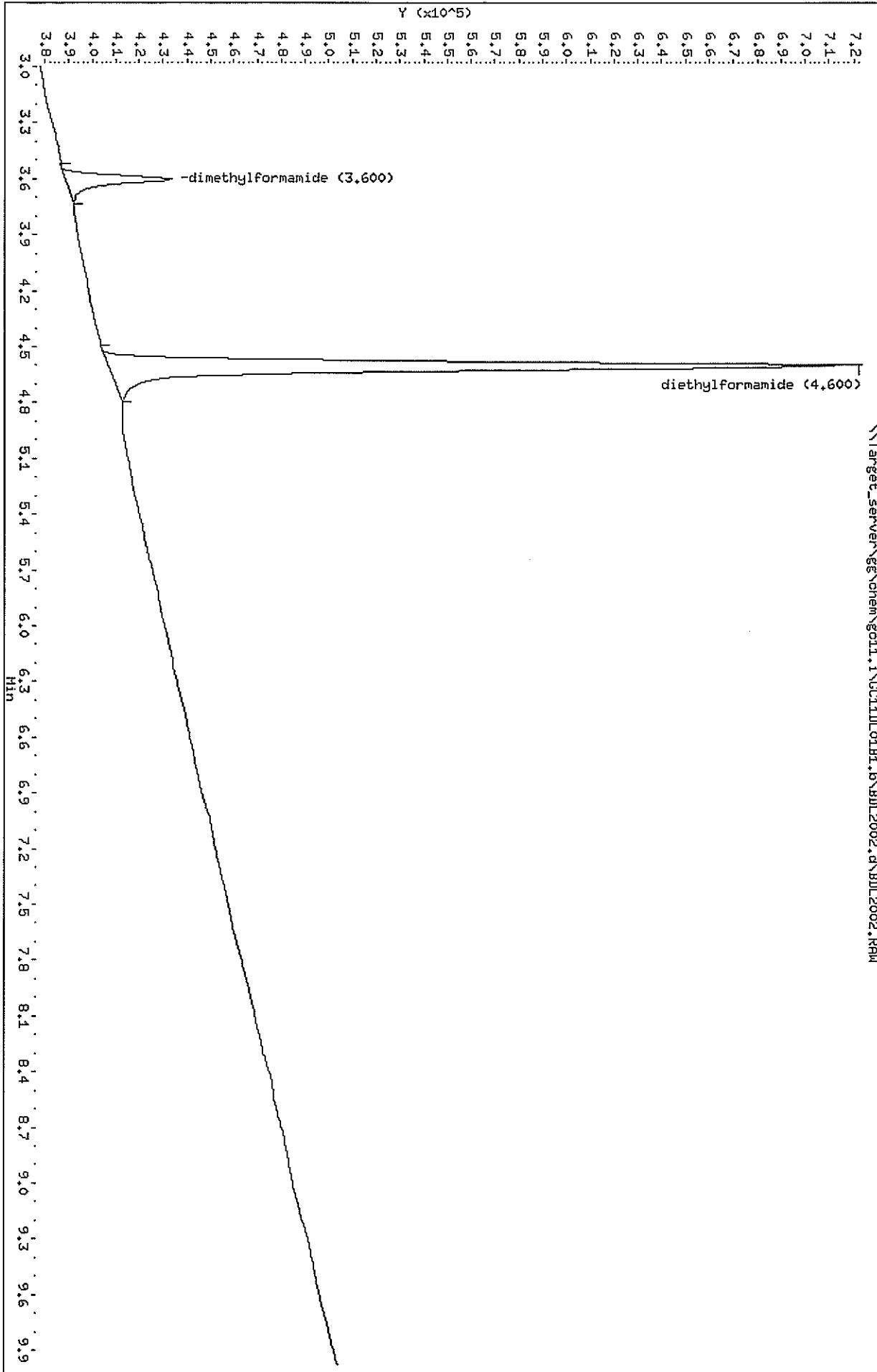
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_Server\\gg\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2002.d\\BDL2002.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/01/10 Time: 1125

Lab File ID: BDL2013 Init. Calib. Date(s): 11/17/10 11/17/10

Init. Calib. Times: 1515 1641

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2694800	0.2500000	620800.00	0.01	7.79	25.00	LINR
diethylformamide	2.8256000	2.5000000	478540.00	0.01	13.02	25.00	LINR

FORM VII PEST

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2013.d  
Lab Smp Id: CV 0.25  
Inj Date : 01-DEC-2010 11:25  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.600	3.600	0.000	155200	0.25000	0.269	
§ 2 diethylformamide	4.600	4.600	0.000	1196358	2.50000	2.82	

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2013.d  
Date : 01-DEC-2010 14:25

Client ID:  
Sample Info: DMEFB049A.H,GC11D\\01B1.B,1.CU 0.25

Purge Volume: 0.0

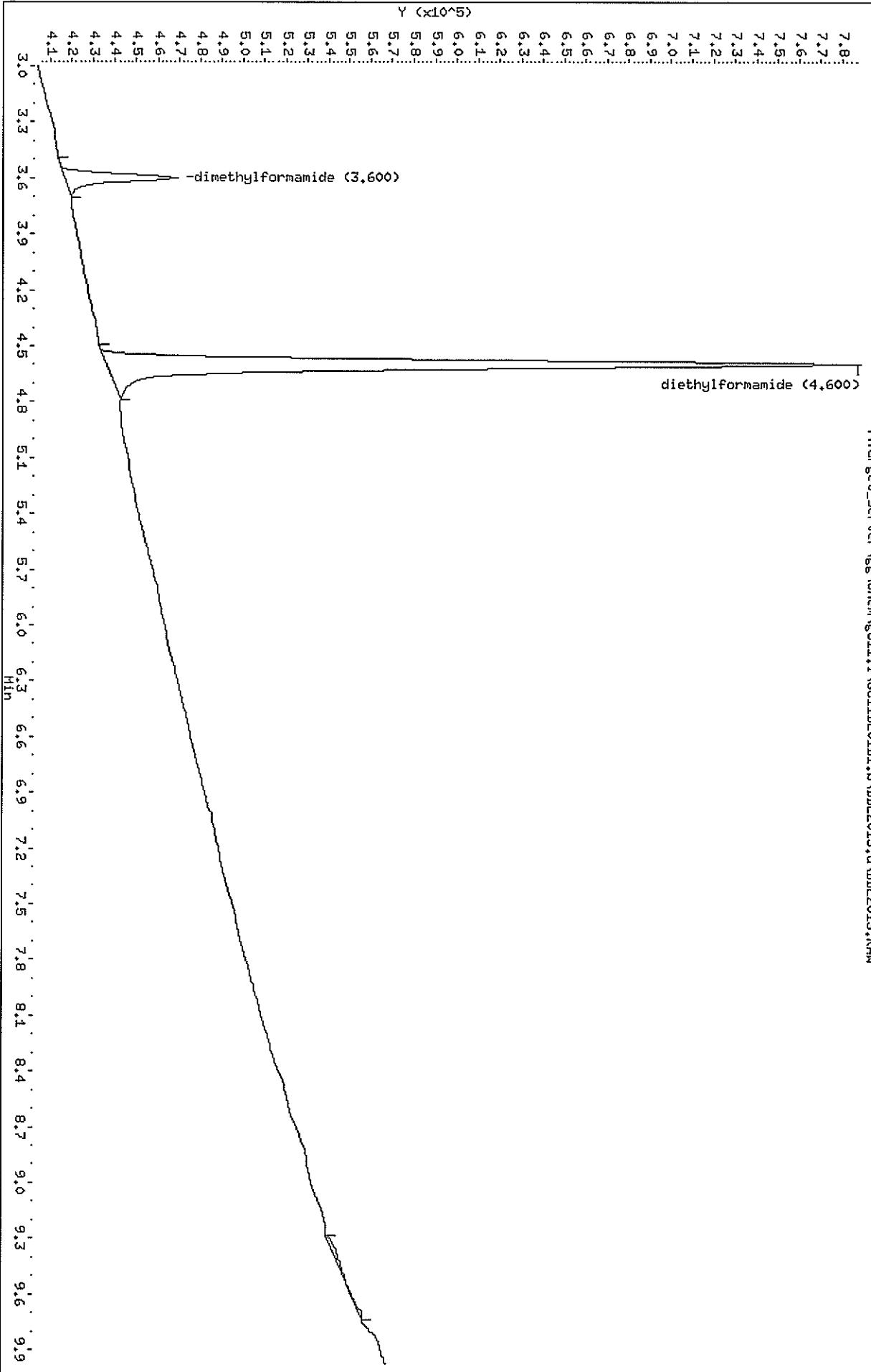
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2013.d\\BDL2013.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/21/10 Time: 1527

Lab File ID: BDL2130 Init. Calib. Date(s): 12/21/10 12/21/10

Init. Calib. Times: 1049 1230

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2731600	0.2500000	444160.00	0.01	9.26	25.00	LINR
diethylformamide	2.9402000	2.5000000	326660.00	0.01	17.61	25.00	LINR

FORM VII PEST

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2130.d  
Lab Smp Id: CV 0.25  
Inj Date : 21-DEC-2010 15:27  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( mg/L)	ON-COL ( mg/L)	
	====	=====	=====	=====	=====	=====	=====
1 dimethylformamide	3.560	3.533	0.027	111041	0.25000	0.273	
\$ 2 diethylformamide	4.546	4.533	0.013	816656	2.50000	2.94	

Data File: \Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2130.d  
Date : 21-DEC-2010 15:27

Client ID:

Sample Info: DHFB051A.H,GC11DL21B1.B,1,CV 0.25

Purge Volume: 0.0

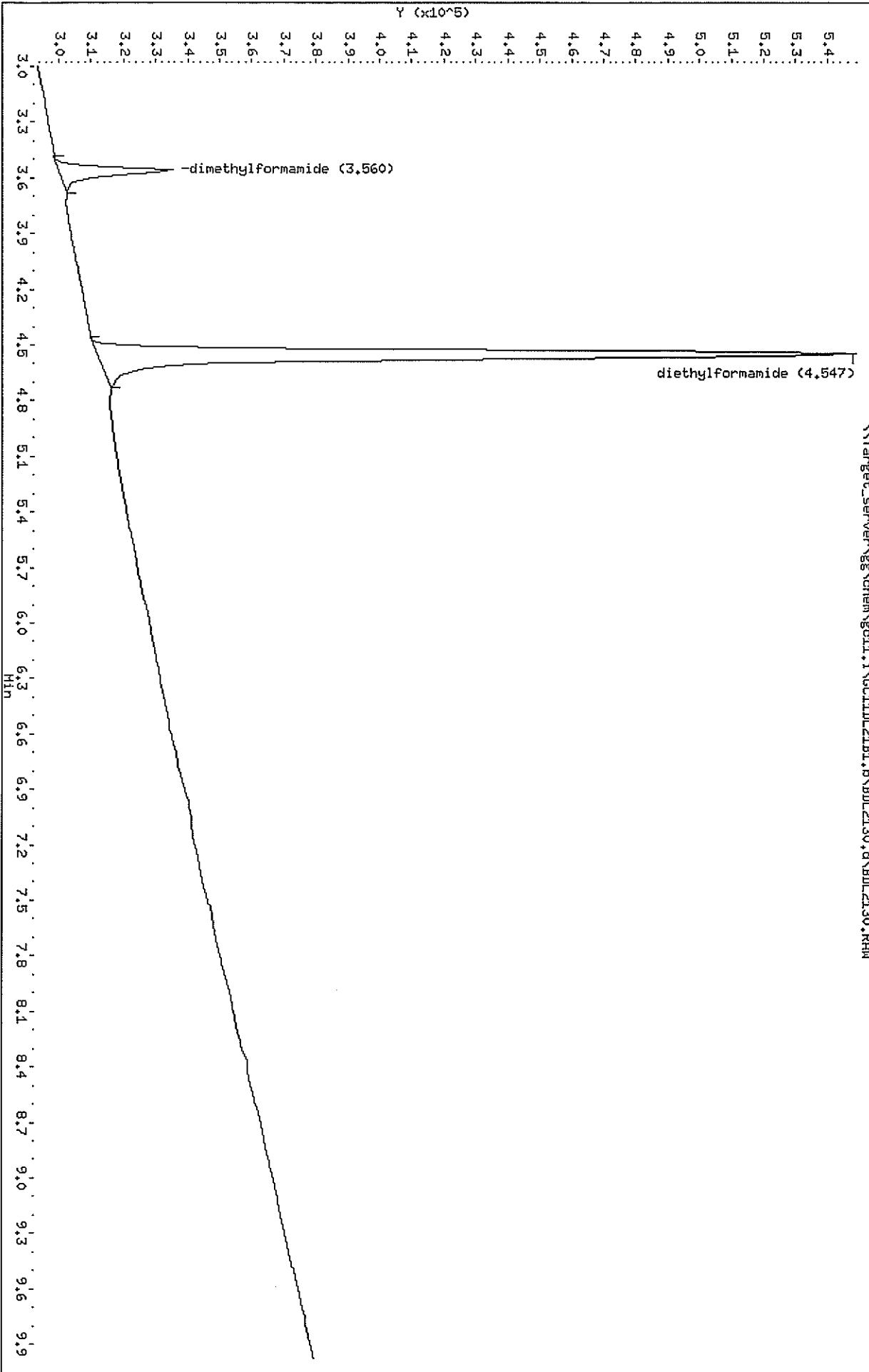
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2130.d\BDL2130.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: RI ANALYTICAL - WILMINGTON SDG No.: WIL-16

Instrument ID: GC11 Calibration Date: 12/21/10 Time: 1625

Lab File ID: BDL2134 Init. Calib. Date(s): 12/21/10 12/21/10

Init. Calib. Times: 1049 1230

GC Column: STABILWAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2847400	0.2500000	463340.00	0.01	13.90	25.00	LINR
diethylformamide	2.9260000	2.5000000	325070.00	0.01	17.04	25.00	LINR

FORM VII PEST

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2134.d  
Report Date: 07-Jan-2011 07:55

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2134.d  
Lab Smp Id: CV 0.25  
Inj Date : 21-DEC-2010 16:25  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,CV 0.25  
Misc Info : CV  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT ( mg/L)	ON-COL ( mg/L)	
1 dimethylformamide	3.560	3.533	0.027	115836	0.25000	0.285(M)	M4
\$ 2 diethylformamide	4.546	4.533	0.013	812667	2.50000	2.93	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\chem\\go11.i\\GC11DL21B1.b\\BDL2134.d  
Date : 21-DEC-2010 16:25

Client ID:

Sample Info: DMFB051A.H,GC11DL21B1.B,1,CV 0.25

Purge Volume: 0.0

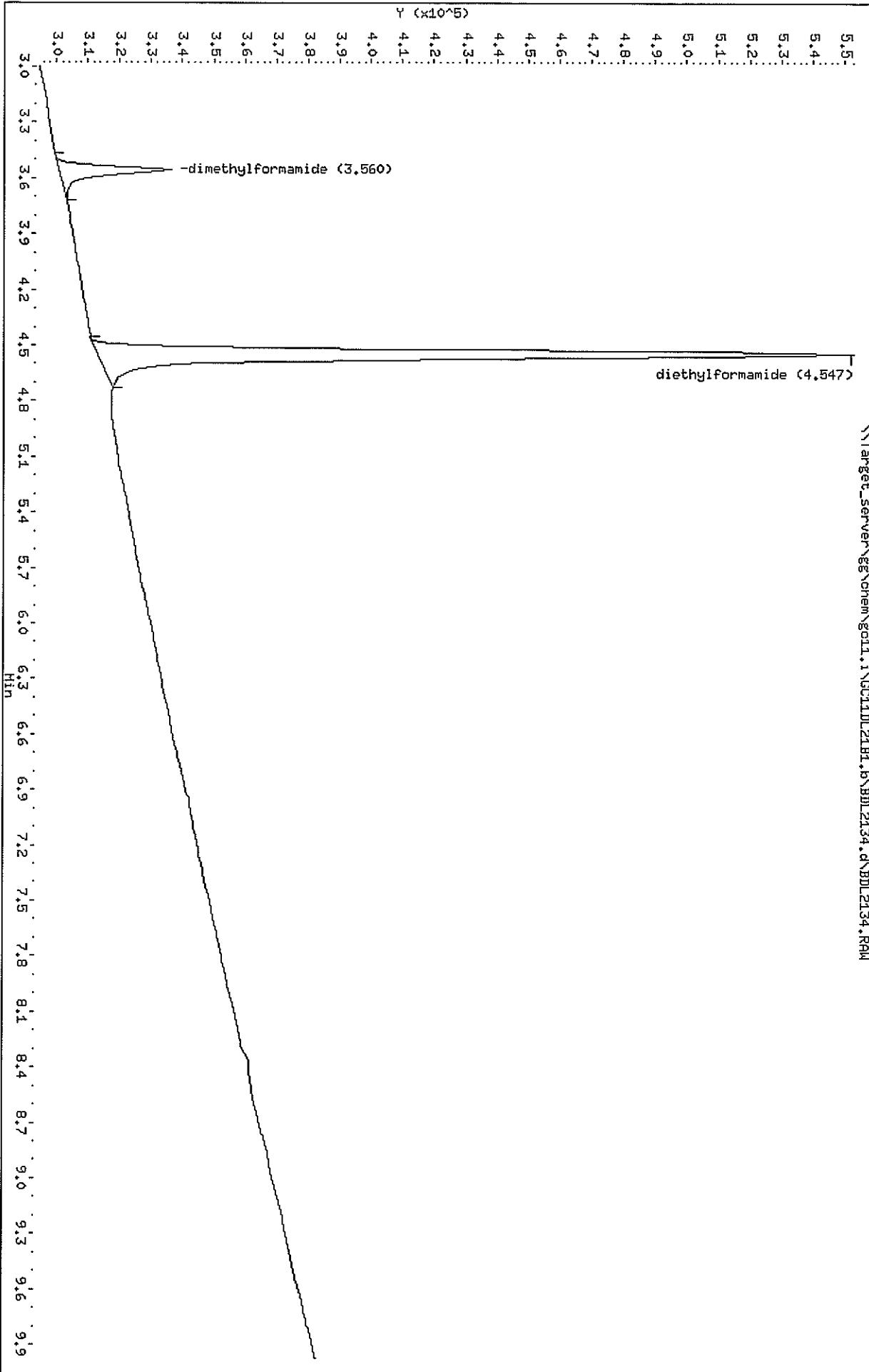
Column phase: Stabilux

Instrument: go11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\chem\\go11.i\\GC11DL21B1.b\\BDL2134.d\\BDL2134.RAW



## **Raw QC Data Section**

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Lab ID: WG85685-1  
Project: RI Analytical - Wilmington Client ID: WG85685-Blank  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 01-DEC-2010 08:20 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG85685  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		88%				

Page 01 of 01 BDL2003.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2003.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2003.d  
Lab Smp Id: WG85685-1 Client Smp ID: WG85685-Blank  
Inj Date : 01-DEC-2010 08:20  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,WG85685-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.b\dmfB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS		REVIEW CODE
					( mg/L)	( mg/L)	
\$ 2 diethylformamide	4.600	4.600	0.000	358803	0.87811	0.878	

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2003.d

Date : 01-DEC-2010 08:20

Client ID: WGS5685-Blank

Sample Info: DHEB049A.H,GC11D\\01B1.B,1,WGS5685-1

Purge Volume: 0.0

Column Phase: Stabilwax

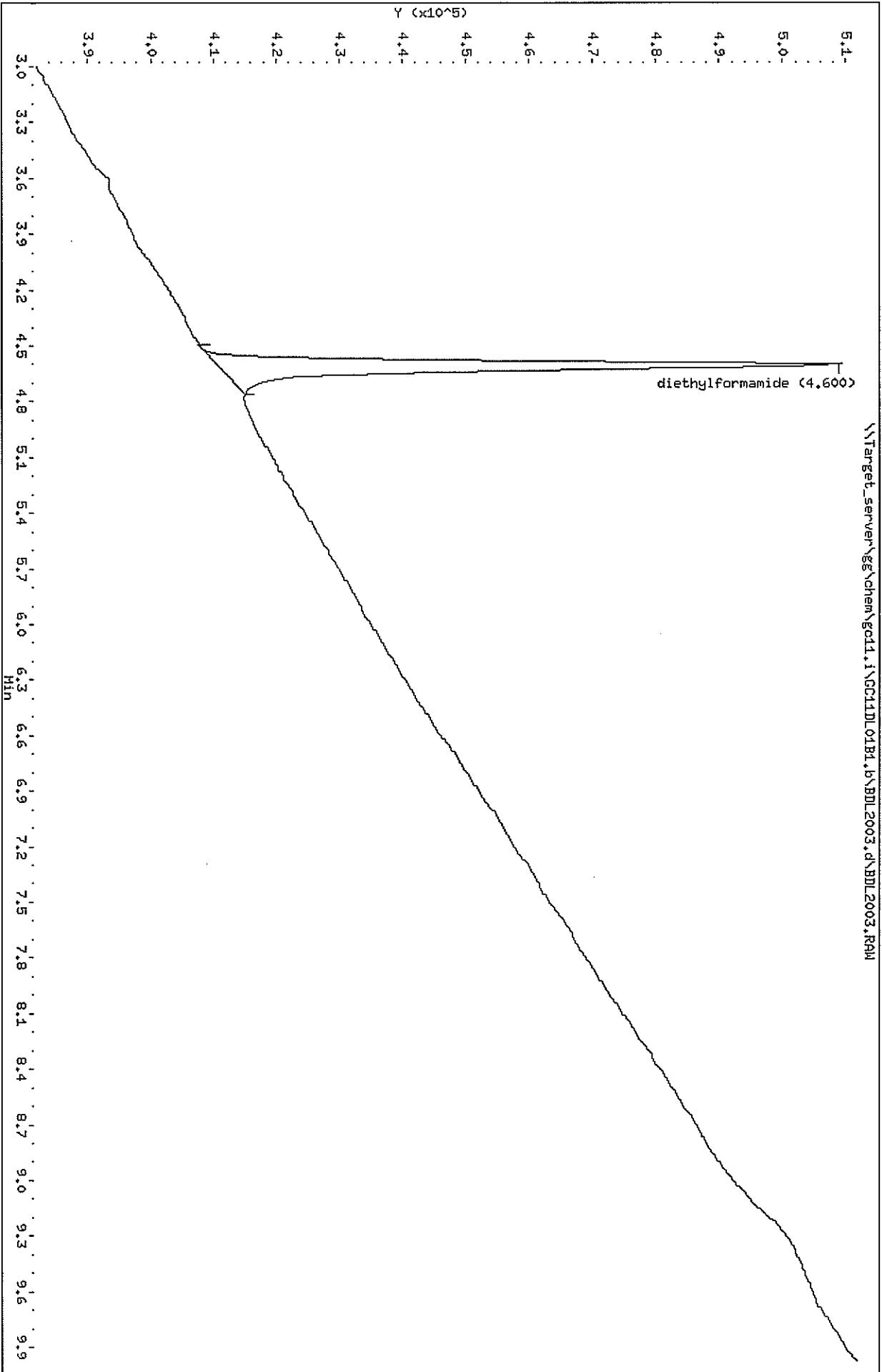
Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11D\\01B1.b\\BDL2003.d\\BDL2003.RAW

diethylformamide (4.600)



**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Lab ID: WG86508-1  
Project: RI Analytical - Wilmington Client ID: WG86508-Blank  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 21-DEC-2010 13:00 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG86508  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0031
	diethylformamide		92%				

Page 01 of 01 BDL2120.d

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2120.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2120.d  
Lab Smp Id: WG86508-1 Client Smp ID: WG86508-Blank  
Inj Date : 21-DEC-2010 13:00  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,WG86508-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN		FINAL		=====	=====	
	( mg/L)	( mg/L)	=====	=====	=====	=====	
\$ 2 diethylformamide	4.533	4.533	0.000	119721	0.46050	0.460 (M)	M4

QC Flag Legend

M - Compound response manually integrated.

JLP  
010711

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11DL21B1.b\\BDL2120.d

Date : 21-DEC-2010 13:00

Client ID: WGB6508-Blank

Sample Info: DHFB051A.M,GC11DL21B1.B,1,WGB6508-1

Purge Volume: 0.0

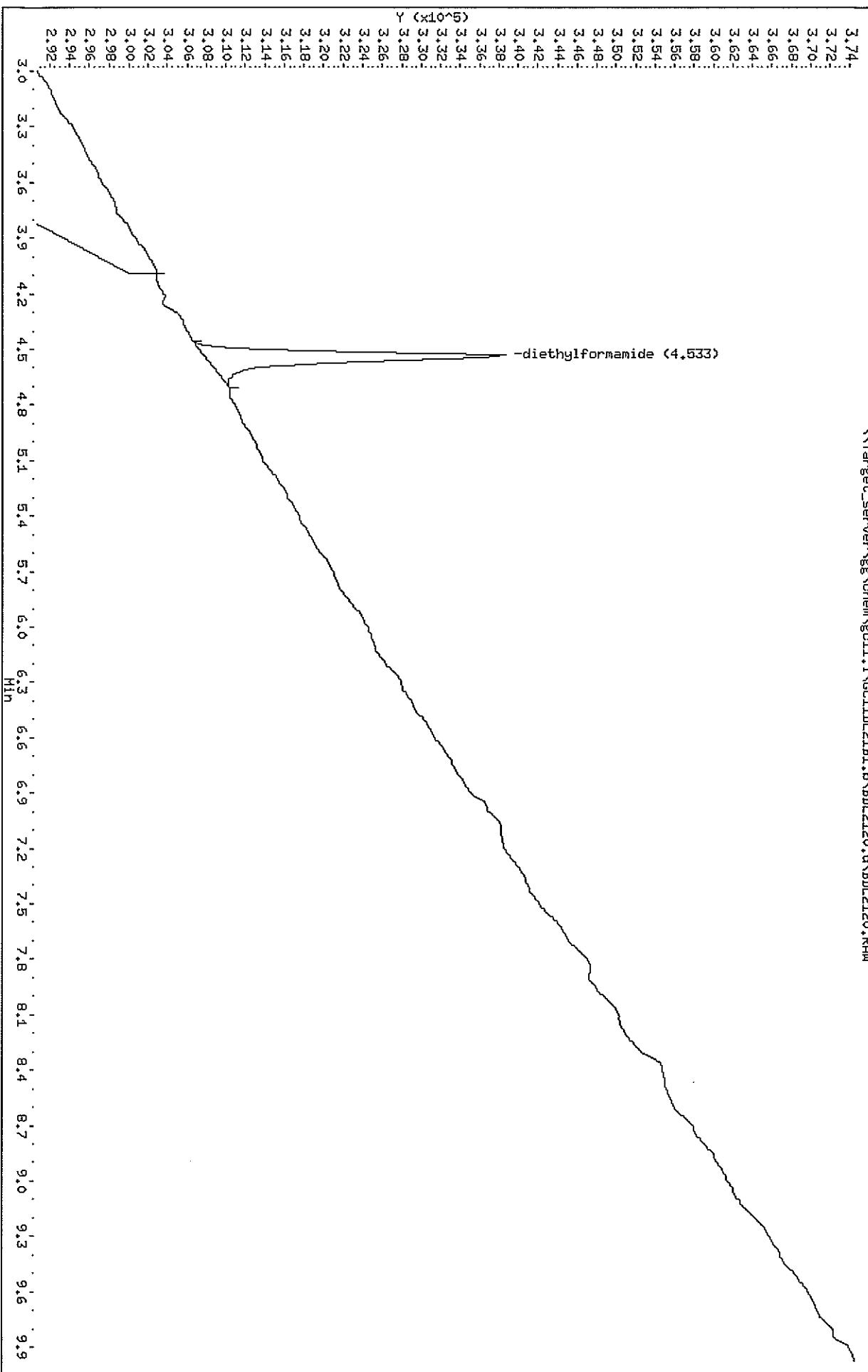
Column phase: Stabilimax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11DL21B1.b\\BDL2120.d\\BDL2120.Raw



KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG85685-2 & WG85685-3  
Project: RI Analytical - Wilmington Client ID: WG85685-LCS & WG85685-LCSD  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 12/01/10 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG85685  
Matrix: WATER Units: mg/L

COMPOUND	LCS	LCSD	SAMPLE	LCS	LCSD	LCS	LCSD	%RPD	QC.	
	SPIKE	SPIKE	CONC.	CONC.	CONC.	%REC.	%REC.	%RPD	LIMIT	LIMITS
dimethylformamide	0.10	0.10	NA	0.10	0.10	99	98	1	30	70-130

Data File: \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2004.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2004.d  
Lab Smp Id: WG85685-2 Client Smp ID: WG85685-LCS  
Inj Date : 01-DEC-2010 08:34  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,WG85685-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.613	3.600	0.013	56465	0.09903	0.0990	
\$ 2 diethylformamide	4.613	4.600	0.013	36326	0.12829	0.128	

Data File: \\Target\_server\\gchem\\gc14.i\\GC11D\\01B1.b\\BDL2004.d

Date : 01-DEC-2010 09:34

Client ID: WG85685-LCS

Sample Info: DHF-B049A.H,GC11D\\01B1.B,1,WG85685-2

Purge Volume: 0.0

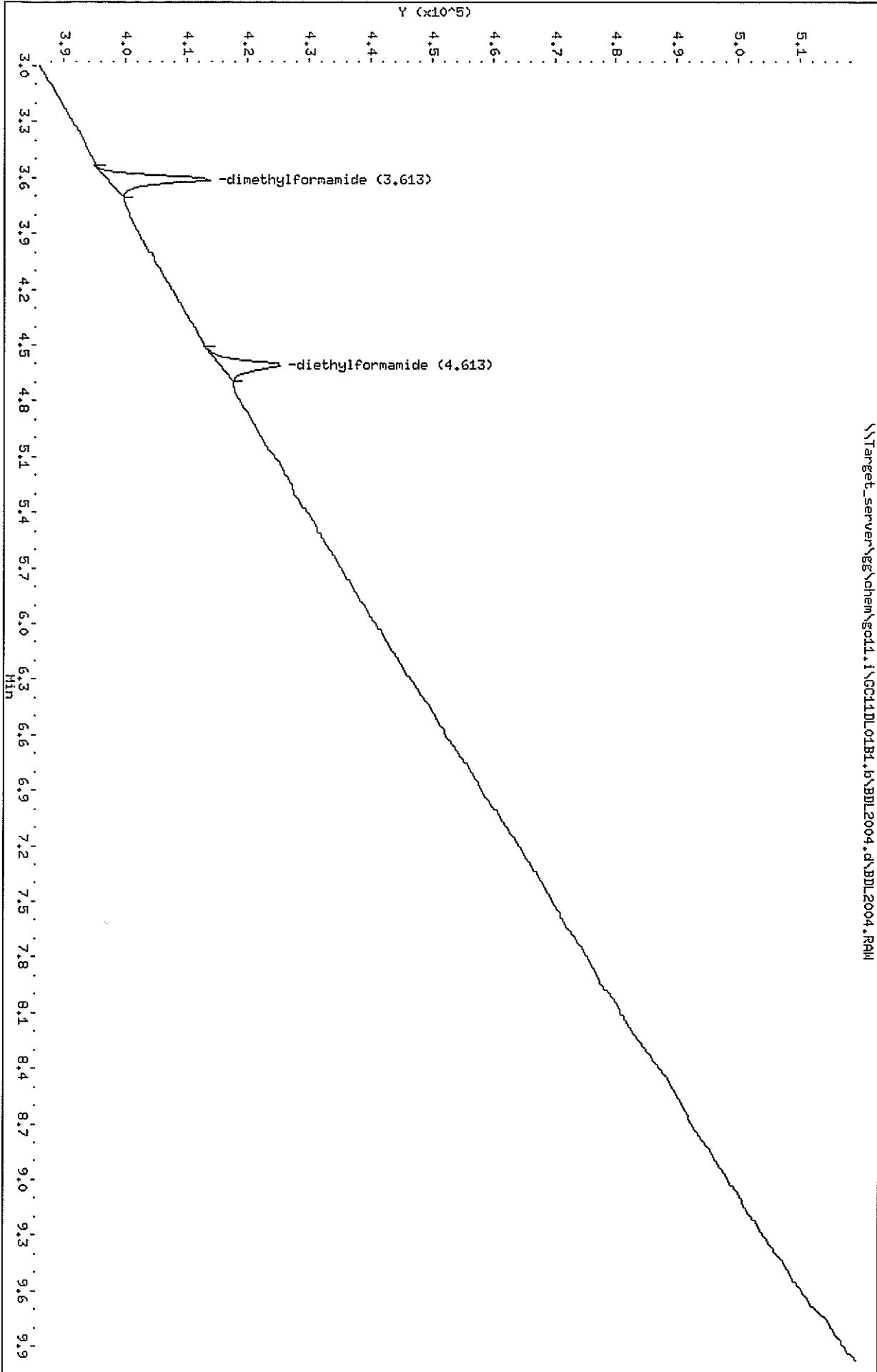
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gchem\\gc14.i\\GC11D\\01B1.b\\BDL2004.d\\BDL2004.RAI



Data File: \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2005.d  
Report Date: 07-Jan-2011 07:54

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL01B1.b\BDL2005.d  
Lab Smp Id: WG85685-3 Client Smp ID: WG85685-LCSD  
Inj Date : 01-DEC-2010 08:48  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB049A.M,GC11DL01B1.B,1,WG85685-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL01B1.B\DMFB049A.m  
Meth Date : 01-Dec-2010 12:11 jprescott Quant Type: ESTD  
Cal Date : 17-NOV-2010 16:41 Cal File: BDK2120.RAW  
Als bottle: 1 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	( mg/L)					
1 dimethylformamide	RT	EXP RT	DLT RT	RESPONSE			
2 diethylformamide	3.613	3.600	0.013	55614	0.09756	0.0976	
	4.613	4.600	0.013	34845	0.12485	0.125	

Data File: \\Target\_server\\gg\\chem\\gc11.i\\GC11DL01BL.b\\BDL2005.d

Date : 01-DEC-2010 08:48

Client ID: WGS5685-LCSD

Sample Info: DHFB049A.H,GC11DL01BL.B,1,WGS5685-3

Purge Volume: 0.0

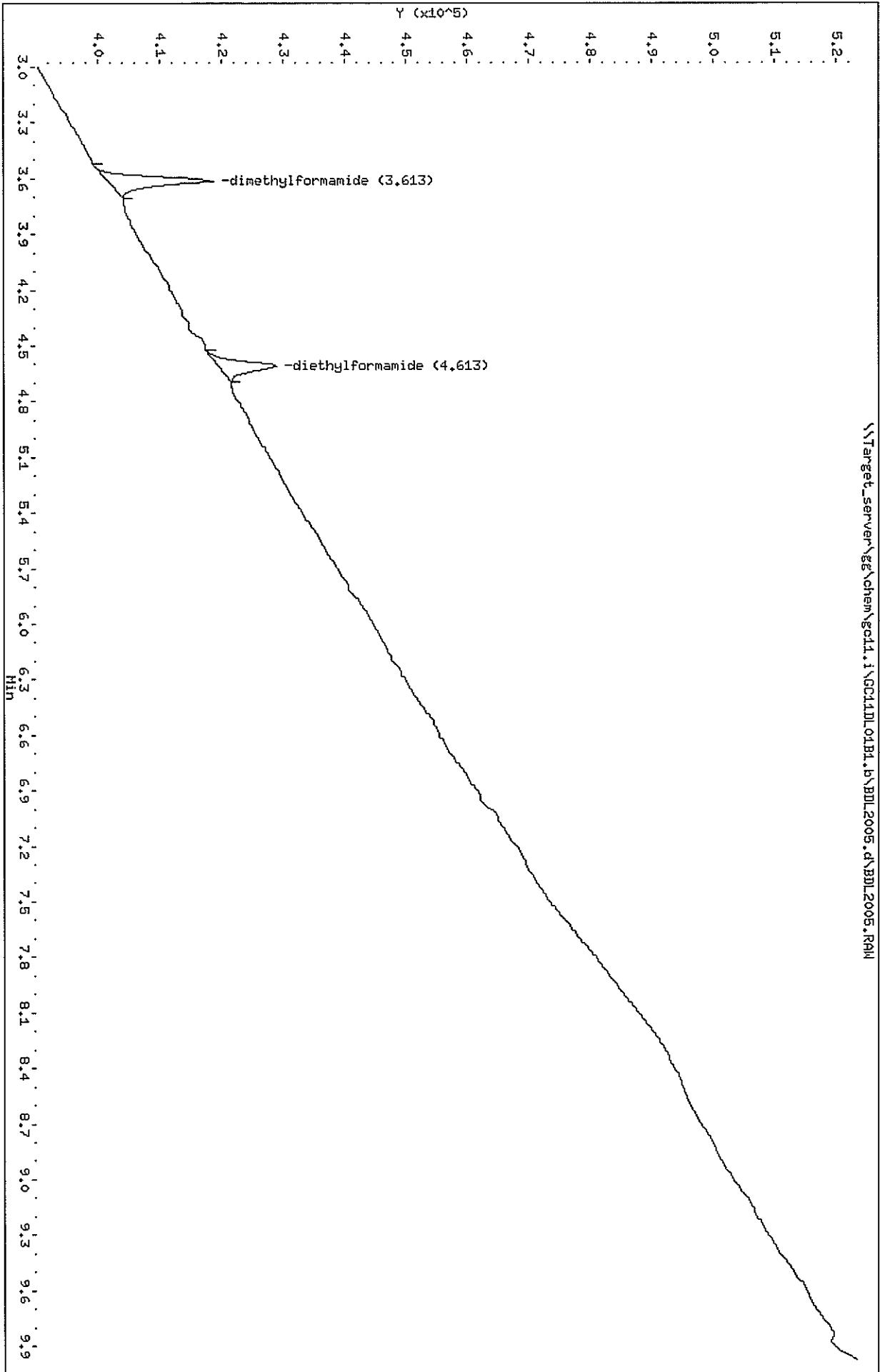
Column Phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\gc11.i\\GC11DL01BL.b\\BDL2005.d\\BDL2005.RAW



**KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE**

Client: Lab ID: WG86508-2 & WG86508-3  
Project: RI Analytical - Wilmington Client ID: WG86508-LCS & WG86508-LCSD  
PO No: SDG: WIL-16  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 12/21/10 Analysis Method: SW846 8033M  
Report Date: 01/07/2011 Lab Prep Batch: WG86508  
Matrix: WATER Units: mg/L

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD LIMIT	QC. LIMITS
dimethylformamide	0.10	0.10	NA	0.10	0.11	95	110	14	30 70-130

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2121.d  
Lab Smp Id: WG86508-2 Client Smp ID: WG86508-LCS  
Inj Date : 21-DEC-2010 13:14  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,WG86508-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	( mg/L)						
1 dimethylformamide	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	( mg/L)		
	====	=====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.533	3.533	0.000	37393	0.09526	0.0953(M)	M4	
\$ 2 diethylformamide	4.546	4.533	0.013	18453	0.10018	0.100		

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\eg\chem\gc11.i\GC11DL21B1.b\BDL2121.d  
Date : 21-DEC-2010 13:14

Client ID: MC86508-LCS  
Sample Info: DHFB051A.H,GC11DL21B1.B,1,MC86508-2

Purge Volume: 0.0

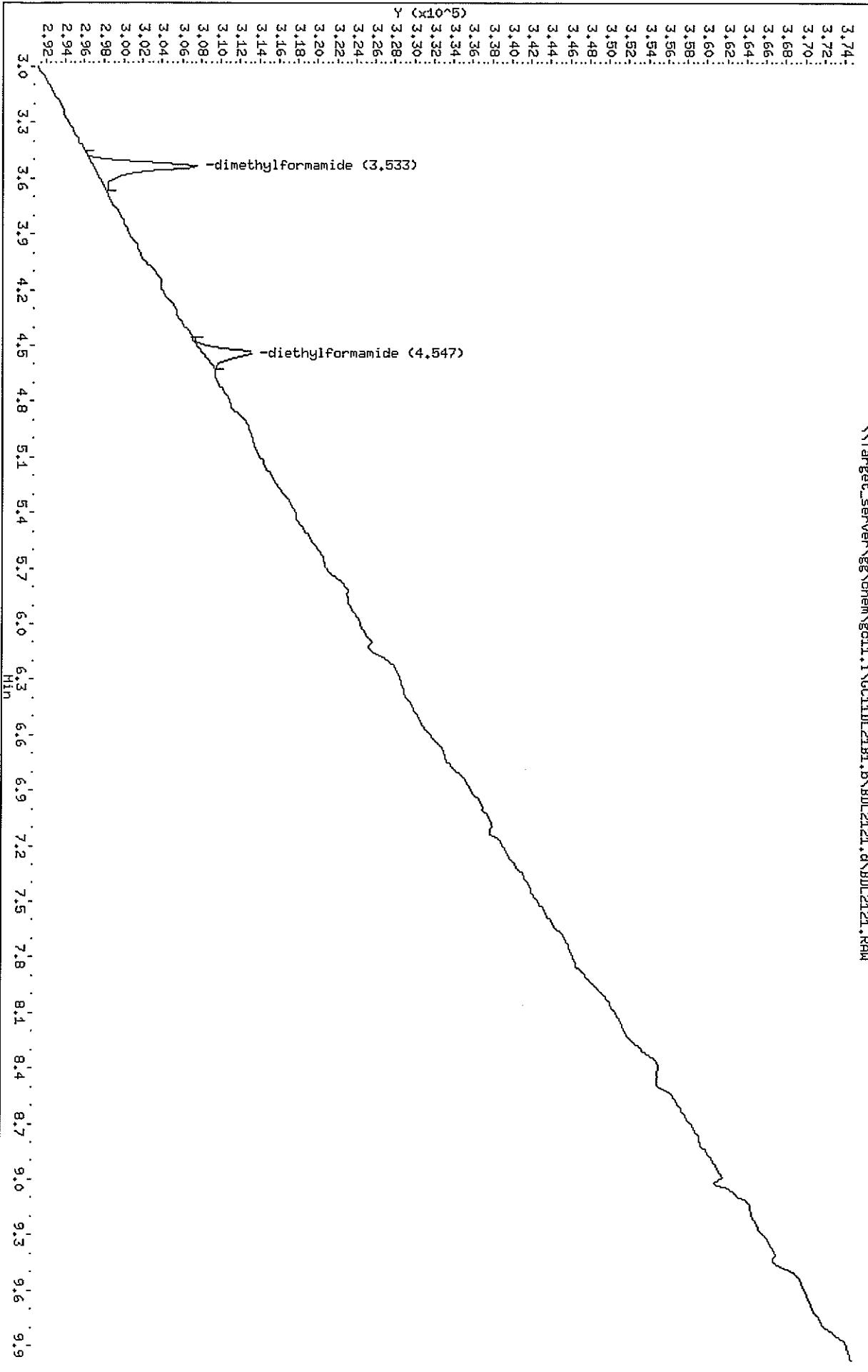
Column phase: Stabilwax

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\eg\chem\gc11.i\GC11DL21B1.b\BDL2121.RAW



Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2122.d  
Lab Smp Id: WG86508-3 Client Smp ID: WG86508-LCSD  
Inj Date : 21-DEC-2010 13:29  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,WG86508-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11DL21B1.B\DMFB051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN		FINAL				
	( mg/L)	( mg/L)					
1 dimethylformamide	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	( mg/L)	M4
	====	=====	=====	=====	=====	=====	=====
1 dimethylformamide	3.546	3.533	0.013	43720	0.11054	0.110(M)	
\$ 2 diethylformamide	4.546	4.533	0.013	20644	0.10798	0.108	

JW  
010711

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\gg\chem\go11.i\GC11DL21B1.b\BDL2122.d  
Date : 21-DEC-2010 13:29

Client IP: NC08508-LCSD

Sample Info: DIF-B051A.H,GC11DL21B1.B,1,NC086508-3

Purge Volume: 0.0

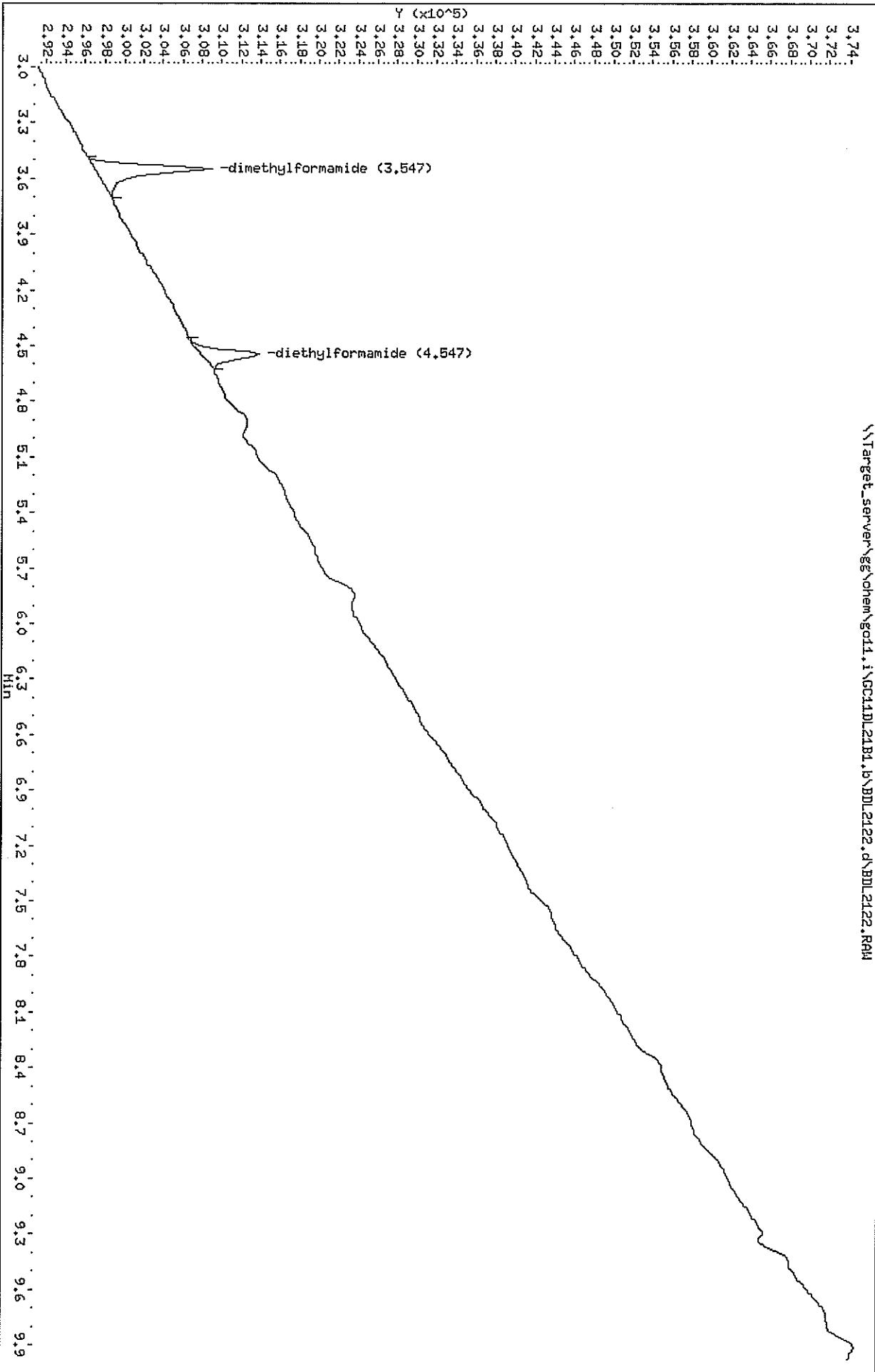
Column phase: Stabilux

Instrument: go11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\gg\chem\go11.i\GC11DL21B1.b\BDL2122.d\BDL2122.RAW



**KATAHDIN ANALYTICAL SERVICES**  
**MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Client: Olin Corporation  
Project: RI Analytical - Wilmington  
PO No:  
Sample Date: 12/10/10  
Received Date: 12/10/10  
Extraction Date:  
Analysis Date: 12/21/10  
Report Date: 01/07/2011  
Matrix: WATER

Lab ID: WG86508-4 & WG86508-5  
Client ID: OC-SW-ISCO-1-XXXMS & OC-SW-ISCO-1-XXMSD  
SDG: WIL-16  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG86508  
Units: mg/L

	MS	MSD	SAMPLE	MS	MSD	MS	MSD	%RPD	QC.	
COMPOUND	SPIKE	SPIKE	CONC.	CONC.	CONC.	%REC.	%REC.	%RPD	LIMIT	LIMITS
dimethylformamide	0.10	0.10	0.00	0.10	0.12	104	115	10	30	70-130

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2132.d  
Lab Smp Id: WG86508-4 Client Smp ID: OC-SW-ISCO-1-XXXMS  
Inj Date : 21-DEC-2010 15:56  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,WG86508-4  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfb051A.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	( mg/L)		
1 dimethylformamide	3.560	3.533	0.027	41203	0.10446	0.104		
\$ 2 diethylformamide	4.546	4.533	0.013	27562	0.13259	0.132(R)		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\Target\_server\\gg\\chem\\go11.i\\GC11DL21B4.b\\BDL2132.d

Date : 21-DEC-2010 15:56

Client ID: OC-SIL-ISCO-1-KWHS

Sample Info: DMF-BOMA,H,GC11DL21B4.B,1,WC86508-4

Purge volume: 0.0

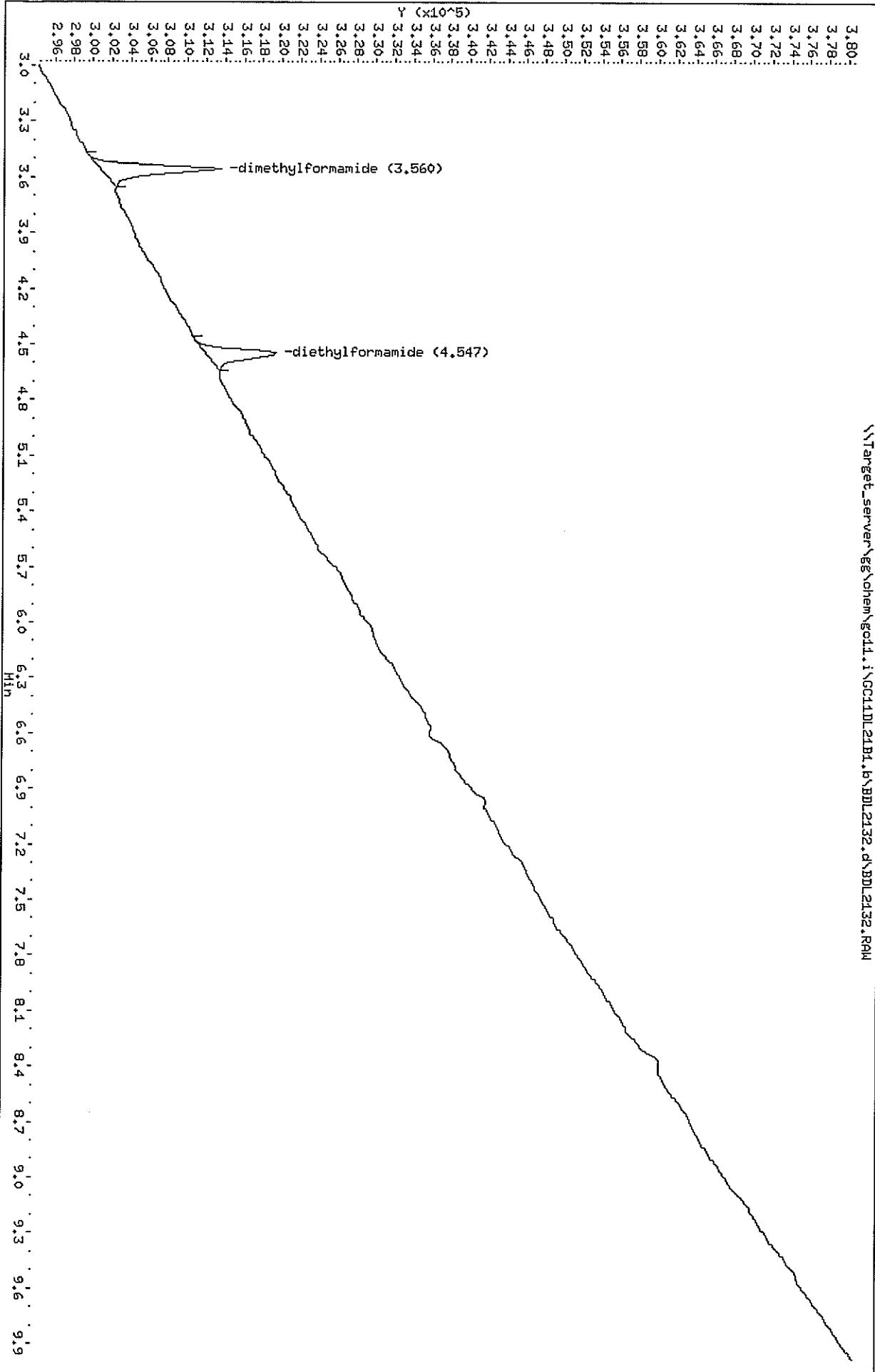
Column phase: Stabilux

Instrument: Ec11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\gg\\chem\\go11.i\\GC11DL21B4.b\\BDL2132.d\\BDL2132.RAW



Data File: \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2133.d  
Report Date: 07-Jan-2011 07:55

Katahdin Analytical Services

Data file : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\BDL2133.d  
Lab Smp Id: WG86508-5 Client Smp ID: OC-SW-ISCO-1-XXXMSD  
Inj Date : 21-DEC-2010 16:10  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB051A.M,GC11DL21B1.B,1,WG86508-5  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\gg\chem\gc11.i\GC11DL21B1.b\dmfb051a.m  
Meth Date : 22-Dec-2010 07:10 gc11.i Quant Type: ESTD  
Cal Date : 21-DEC-2010 12:30 Cal File: BDL2118.d  
Als bottle: 1 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN ( mg/L )	FINAL ( mg/L )	
1 dimethylformamide	3.546	3.533	0.013	45494	0.11483	0.115(M)	M4
\$ 2 diethylformamide	4.546	4.533	0.013	23487	0.11810	0.118	JLP 0107"

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\ge\\chem\\gc11.i\\GC11D\\21B1.b\\BDL2133.d  
Date : 21-DEC-2010 16:10

Client ID: DC-SIM-ISC0-1-KAHNSP

Purge Volume: 0.0

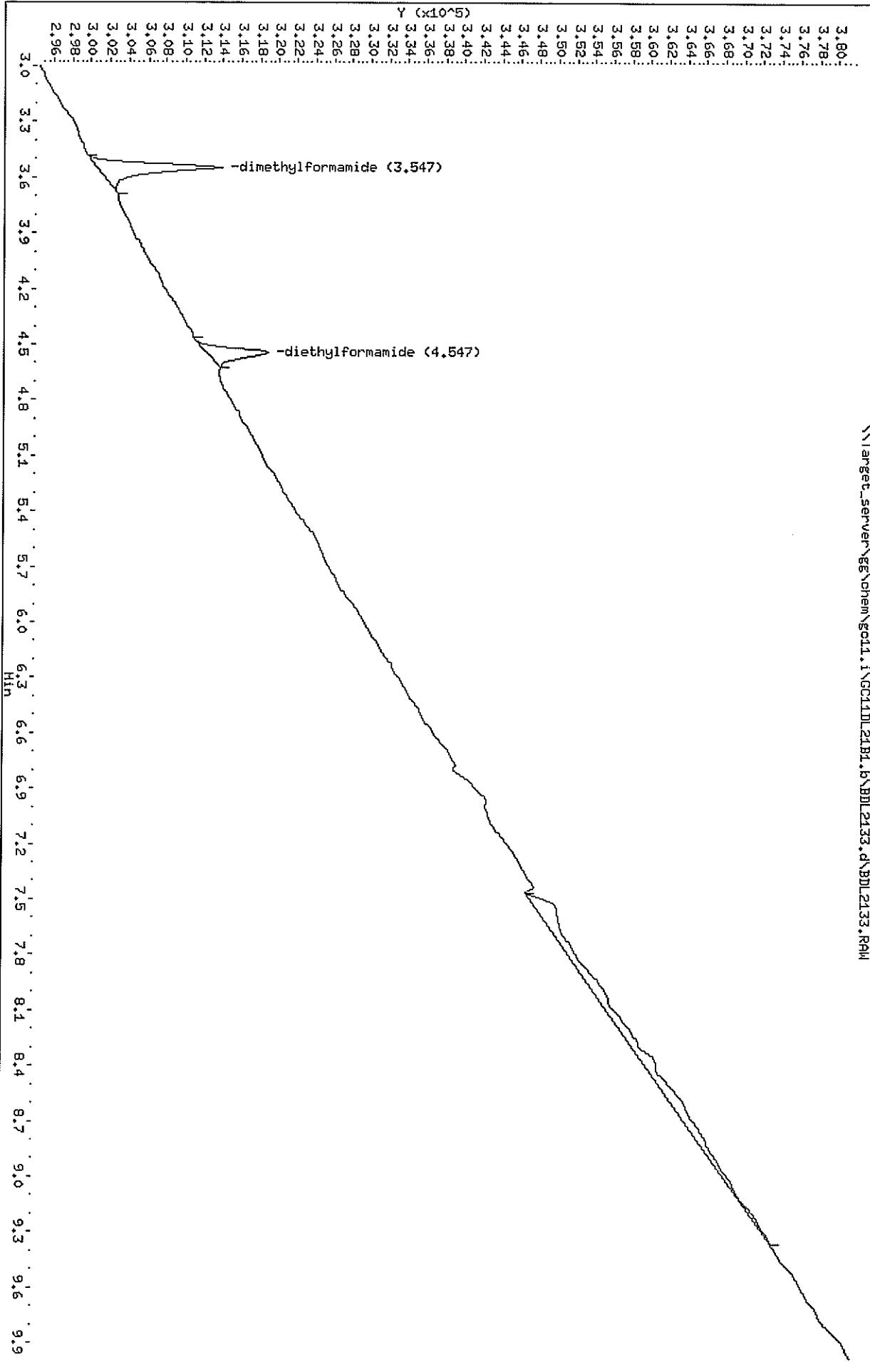
Column phase: Stabilux

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53

\\Target\_server\\ge\\chem\\gc11.i\\GC11D\\21B1.b\\BDL2133.d\\BDL2133.RAW



## **Logbooks and Supporting Documents**

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Method (circle):  
SW846 8015M - Glycols  
SW846 8015M - Alcohols  
SW846 8015M - 2-MOE  
~~SW846 8033M - DMF~~

Reviewed by/Date: \_\_\_\_\_

Signal \_\_\_\_\_ Power \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
11-17-10	JUP	BDK2113	Water	N	DMFB049A	342	
		114	1CAL 0.02	Y			GCV2583
		115	0.05				GCV2584
		116	0.1				GCV2585
		117	0.25				GCV2652
		118	↓ 0.5	↓			GCV2587
		119	Water	N			
		120	1CAL 1.0	Y			GCV2588
		121	Water	N			
		122	↓	N	↓	↓	
11-18-10	JUP	123	Water	N	DMFB049A		
		124	CV 0.25	Y			
		125	Water	N			
		126	BLANK WG 85239-1	Y			
		127	MDL 1	Y			2ul of GCV2591
		128	2				
		129	3				
		130	4				
		131	5				
		132	6				
		133	7				
		134	↓ 8 <sup>10/10/10</sup>				
		135	MDL Q check	↓			↓
		136	CV 0.25	Y			
		137	Water	N			
		138	WG 85239-2	Y			
		139	↓ -3	Y	↓	↓	

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate	5	GCV2581	
2	LCS	10	GCV2591	
3	CV	—	GCV2652	
4				

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Method (circle):

SW846 8015M - Glycols

SW846 8015M - Alcohols

SW846 8015M - 2-MOE

SW846 8033M - DMF

Signal \_\_\_\_\_

Power \_\_\_\_\_

Reviewed by/Date: \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
11-29-10	JUP	BDL1167	CV 25	Y	Gly A047A	342	PGT GCV2652
11-30-10	JUP	168	MeOH	N			
		169	CV 25	Y			GCV2652
		170	SD7353-4RA	Y			
		171	-3DL	Y			i.5 100/500
		172	-1DL	Y			1:1000 100/1000 X 3
		173	-2DL	Y			J ↓
↓	↓	↓	174 CV 25	Y			GCV2652
11-30-10	JUP	BDL2175	Water	N	DMF B049A		
		176	C.V tot				
		177					
↓	↓	↓	178				
12-1-10	JUP	BDL2001	Water	N			
		02	CV025	Y			
		03	SD85685-1	Y			
		04	-2	Y			
		05	-3	Y			
		06	SD7287-1	A	Y		
		07	-2				
		08	-3				
		09	↓ -4				
		10	SD7363-1				
		11	↓ -2				
		12	SD7287-5				
↓	↓	↓	13 CV025				
12-2-10	JUP	BDL1014	Water	N	Gly A047A		
↓	↓	↓	15 CV 025	Y			GCV2652

JUP120210

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate	S	GCV2581	
2	LCS	10	GCV2591	
3	CV	—	GCV2652	
4				

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Method (circle):  
 SW846 8015M - Glycols  
 SW846 8015M - Alcohols  
 SW846 8015M - 2-MOE  
 SW846 8033M - DMF  
 Signal \_\_\_\_\_ Power \_\_\_\_\_

Reviewed by/Date: \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
12-9-10	JUP	B00L10 096	SD7612-1DLC	Y	GlyA047A	342	1:10 100/1000
		↓ 097	↓ -78C	↓		↓	1:5 100/500
		↓ 098	CV 25	↓		↓	
12-16-10	JUP	099	MeOH	N			
		100	CV 25	Y			
		101	WG 86315-1				
		102	↓ -2				
		103	↓ -3				
		104	SD7615-1 D				
		105	SD7739-1 E				
		106	SD7668-1D A				1:10000 100/1000 X4
		107	↓ -2	↓		↓	
		108	↓ -3	↓	↓	↓	
		↓ 109	CV 25	Y		↓	
12-21-10	JUP	110	Water	N	DMFBOSIA		
		111	ICAL 0.005	Y			GCV2665
		112	0.02	Y			GCV2583
		113	0.05	Y			GCV2584
		114	0.1	Y			GCV2585
		115	0.25	Y			GCV2652
		116	↓ 0.5	Y			(GCV2587)
		117	Water	N			
		118	ICAL 1.0	Y			GCV2588
		119	Water	N			
		120	WG 86508-1	Y			Sul GCV2581
		121	↓ -2	Y			10.0 6CV2591
		↓ 122	↓ -3	Y		↓	

Glycol

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate	10	GCV2642	
2	LCS	25	GCV2638	
3	CV	—	GCV2648	
4				

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Method (circle):  
SW846 8015M - Glycols  
SW846 8015M - Alcohols  
SW846 8015M - 2-MOE  
SW846 8033M - DMF  
Signal \_\_\_\_\_ Power \_\_\_\_\_

Reviewed by/Date: \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
12-6-10	JVP	BDL 2	123 W686508-6 A	Y	DMFB051A	3420	S076931 DUP
			124 S07693-1				ZX SS
			125 -2				
			126 -3				
			127 -4				
			128 -5				
			129 -7	↓			
			130 CV 0.25				
			131 S07693-6 A				ZX SS
			132 W686508-4	↓			SST
			133 ↓ -5 ↓				
			134 CV 0.25	↓	↓	↓	
12-22-10	JVP		135 water	N			
			136 CN 0.25	Y			
			137 W686509-1	Y			
			138 ↓ -2	Y			
			139 ↓ -3	Y			
			140 MDL 1	N			↑(P)
			141 2	Y			
			142 3	↓			
			143 4				
			144 5				
			145 6				
			146 ↓ 7				
			147 CV 0.25	↓	↑		
			148 MDL 8	N			↑(P)
✓	✓		149 ↓ 9	Y	↓	↓	

DMF

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate	5	GCV2581	
2	LCS	10	GCV2591	
3	CV	—	GCV2692	
4				